STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

JUDICIAL PURCHASING OFFICE
250 BENEFIT STREET - ROOM 443
PROVIDENCE, RHODE ISLAND 02903
TEL: 401-222-8655
FAX: 401-222-1475

BID SOLICITATION INFORMATION

Date: 11/17/2011	RFP/LOI #: B2011019
Project Name: Boiler Plant and CHW Pump Replacement Project – Murray Judicial Complex	
Opening Date, Time and Place: 12/7/2011 @ 11:00a.m. **Purchasing – Rm. 1006, RI Traffic Tribunal 670 New London Avenue Cranston RI 02920**	

Pre-Bid/Proposal Conference: No **X** Yes on 11/29/2011 Time: 10:00 AM

***** **Mandatory** *****

Location: Lobby on 1st Floor of the Murray Judicial Complex 45 Washington Square Newport, RI 02840

***** **Important** *****

A walk-through will be conducted by the AOSC's Facilities and Operations Department for this project. At that time questions can be asked and measurements taken. It is the responsibility of all bidders to visit and familiarize themselves with this location so as to respond accurately to this RFP. If additional site visits are needed, they can be arranged by contacting Richard Blakely at 401-222-8639

Surety Required: X No ☐ Yes – Bidder is required to provide a bid surety in the form of a bid bond or certified check payable to the State of Rhode Island in an amount not less than five percent (5%) of the bid price.

Bond Required: X No ☐ Yes - Bid surety must be attached to the bid form.

The successful bidder will be required to furnish all insurance documentation as outlined in the attached Judicial Purchasing Rules & Regulations and General Terms & Conditions of Purchase.

This solicitation is for the supply and installation of two (2) condensing boilers, the associated hot water pumps, two (2) chilled water pumps and associated improvements as well as the demolition of all noted equipment listed in the attached documents. Specific bid solicitation information begins on page 3 of this document.

Proposals must be mailed or hand-delivered in a sealed envelope **marked with the above RFP/LOI# and Project Name** to:

Rhode Island Traffic Tribunal
670 New London Avenue, Cranston RI, 02920
Finance, Room 1006

The bid process and resulting contract are subject to the Judicial Purchasing Rules and Regulations and General Terms and Conditions of Purchase. Submission of a bid in response to this solicitation is acknowledgement and acceptance of the Judicial Purchasing Rules & Regulations and General Terms & Conditions of Purchase.

The AOSC reserves the right to cancel this RFP, award on the basis of cost alone, accept or reject any or all bids, and to act in its best interest. Proposals found to be technically or substantially nonresponsive at any point in the evaluation process will be rejected and not considered further. The AOSC may, at its sole option, elect to require presentations(s) by bidders clearly in consideration for award.

Questions concerning this solicitation may be e-mailed to the Judicial Purchasing Office at purchasing@courts.ri.gov **no later than November 30, 2011 at 12:00pm.** Please reference the RFP / LOI number on all correspondence. Answers to questions received, if any, will be posted on the internet as an addendum to this bid solicitation.

Carla M Ciccone
Purchasing Agent
Rhode Island Supreme Court

BSI 5/05

THIS PAGE IS NOT A BIDDER CERTIFICATION FORM

This is a Request for Proposals, not an Invitation for Bids. Responses will be evaluated on the basis of the relative merits of the proposal, in addition to price. There will be no public reading of the bids at the opening, only an announcement of vendors that bid. A bid tabulation will be posted of the RIVIP web site.

INSTRUCTIONS AND NOTIFICATIONS TO BIDDERS

Potential bidders are advised to review all sections of this Request carefully and to follow instructions completely as failure to make a complete submission as described herein may result in rejection of the proposal.

All costs associated with developing or submitting a proposal in response to this Request, or to provide oral or written clarification of its content, shall be borne by the bidder. The AOSC assumes no responsibility for these costs.

Proposals are considered to be irrevocable for a period of not less than sixty (60) days following the opening date, and may not be withdrawn, except with the express written permission of the Judicial Purchasing Committee.

All pricing submitted will be considered to be firm and fixed unless otherwise indicated herein.

Proposals misdirected to other Judiciary locations or which are otherwise not received by the Supreme Court Purchasing office by the time of opening for any cause, will be deemed late and will not be considered. **For the purposes of this requirement, the official time and date shall be that of the time clock in the Judicial Purchasing Office.**

It is intended that an award pursuant to this Request will be made to a prime contractor, who will assume responsibility for all aspects of the work. Joint venture and cooperative proposals will not be considered, but subcontracts are permitted, provided that their use is clearly indicated in the bidder's proposal, and the subcontractor(s) proposed to be used are identified in the proposal.

Bidders are advised that all materials submitted to the AOSC for consideration in response to this Request for Proposals shall be considered to be public records as defined in Title 38 Chapter 2 of the Rhode Island General Laws, without exception, and may be released for inspection immediately upon request once an award has been made.

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250 BENEFIT STREET - ROOM 443
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BID / RFP SPECIFICATION SHEET

Pursuant to Article X ("Methods of Source Selection") of the Judicial Purchasing Rules and Regulations, attached are the bid/ request for proposal specifications for the following project

Project Name: **Boiler Plant and CHW Pump Replacement Project – Murray Judicial Complex**

Project Number: **P2011019**

Prepared by: **Carla M Ciccone – Purchasing Agent**

All bids and/or proposal specifications are subject to and governed by the Judiciary's Rules and Regulations and General Terms and Conditions of Purchase.

Contents:

1.0 Overview

2.0 Scope of Work

3.0 Acknowledgement of Risk and Hold Harmless Agreement

4.0 Additional Insurance Requirements

5.0 Proposal Content and Organization

6.0 Security

7.0 Evaluation Criteria

8.0 Miscellaneous

9.0 Bid Form

Appendix A **BCI Authorization Form**

Appendix B **Specifications and Mechanical Drawings**

Appendix C **Rhode Island Judicial Purchasing Rules and Regulations and Terms and Conditions of Purchase**

1.0 Overview

The Administrative Office of the Rhode Island Supreme Court ("AOSC") is seeking a company ("Contractor" or "Vendor") to provide and install improvements to the heating hot water system as well as the chilled water system as noted per the specifications and drawings in Appendix B for this project located at the Murray Judicial Complex, 45 Washington Square, Newport, Rhode Island 02840.

2.0 Scope of Work

General Qualifications

The Contractor must comply with all applicable licensing and permitting requirements for this type of service. A copy of all required local, state and/or federal (if applicable) license(s) or permit(s) must be submitted with the RFP response. Submission of a bid is acknowledgement that any and all work performed in relation to this bid will be performed by personnel holding the required valid local, state and/or federal license(s) and/or permit(s).

Any and all license and permit fees shall be paid by the Contractor.

If at any time, the Rhode Island Department of Labor, Division of Occupational Safety determines that the work performed by the Contractor does not comply with Rhode Island Law and/or applicable safety regulations, the Contractor shall correct the work to insure compliance at no additional cost to the AOSC.

Contractors must demonstrate they have experience installing the equipment requested.

Inspection Requirements

Bidders are responsible for inspecting the equipment and/or location, taking measurements when required, and familiarizing themselves with the totality of requirements associated with this project before submitting a bid.

Measurements provided with any bid are for reference purposes only and are not guaranteed to be completely accurate.

Safety

Safety measures shall be maintained by the Contractor while working on-site for the duration of this project. All Federal, State, OSHA and local safety codes must be followed at all times.

Time Frame

All work must be performed continuously until the project is complete. The Contractor must be prepared to devote adequate labor and materials to complete the project in a timely manner without delays.

Upon completion, the project will be inspected and accepted by AOSC staff, or an appropriate designee.

Location

The location to be serviced under this contract:

Murray Judicial Complex
45 Washington Square
Newport, RI 02840

Project Plan

A Project Plan must be submitted along with the Bid Form at the time of bid submission.

The Project Plan must outline the steps the bidder will take to accomplish this project and must include a proposed timeline for completion of the project.

Demolition

All demolition is the responsibility of the Contractor. All demolition must be performed in a safe manner. All debris must be disposed of off-site and is the sole responsibility of the Contractor.

Demolition can only be done during non business hours.

The Contractor shall leave all work areas clean and free of debris at the end of each day of work. AOSC personnel will be on hand to spot check these areas.

Installation

The AOSC is seeking a Contractor to provide and install two (2) condensing gas fired hot water boilers, the associated hot water pumps, two (2) chilled water pumps as well as the demolition and removal of the existing two (2) boilers, two (2) heating hot water pumps, two (2) chilled water pumps and associated hardware, piping and equipment as noted in the Specifications and Mechanical Drawings in Appendix B supplied to the ASOC by Creative Environment Corporation for this project at the Murray Judicial Complex.

During the construction timeline, the Courts will be in regular operation. No aspect of the Courts operations can be impeded during the process, unless written notification has been given by the AOSC. A clean environment must be maintained at all times during construction.

The Courts are not open on weekends, therefore the Contractor may work during weekends, provided that written permission has been obtained from the AOSC. All work areas must be clean and the building must be ready for opening on the next regularly scheduled court day.

Hot Work Permits

Hot Work Permits are required to be filled out prior to the shift and at the end of the shift. These permits are required for any work producing sparks, torches, soldering etc. All hot work will be required to stop (1) one hour prior to the end of that shift with the dedicated fire watch and appropriate equipment for each area of work.

The Mechanical Contractor shall be responsible for any disruptions in service to the Fire Alarm system during Hot Work.

Work Times

All construction must take place between the hours of 4:30 PM and 12:30AM on weekdays (unless extenuating circumstances arise) or scheduled on weekends provided that it is coordinated with the AOSC's Facilities and Operations designated contact person.

All deliveries and/or removal of materials must be coordinated with the AOSC's Facilities and Operations designated contact person. This person will be named at time of award.

Charges

Charges for parking, travel, mileage, portal to portal, and other miscellaneous charges will not be covered under the contract.

Waste Removal

All waste generated during this installation must be removed and disposed of off-site. The disposal must be in compliance with all Municipal, State and Federal laws and regulations. All costs will be the responsibility of the contractor.

Warranty

The contractor must offer a warranty of two (2) years, covering all maintenance and repairs of the pump installation commencing on the date of acceptance.

The warranty must include 24 hour / 7 day service and must include OEM specific instructions, as well as maintenance and reports which are to be submitted to the designated Facilities and Operations contact person.

3.0 Acknowledgment of Risk and Hold Harmless Agreement

In addition to the indemnity provisions in the Judicial Terms and Conditions of Purchase and to the fullest extent permitted by law, the selected vendor, its officers, agents, servants, employees, parents, subsidiaries, partners, officers, directors, attorneys, insurers, and/or affiliates (Releasors) agree to release, waive, discharge and covenant not to sue the AOSC, its officers, agents, servants or employees (Releases) from any and all liability, claims, cross-claims, rights in law or in equity, agreements, promises demands, actions and causes of action whatsoever arising out of or related to any loss, damage, expenses (including without limitation, all legal fees, expenses, interest and penalties) or injury (including death), of any type, kind or nature whatsoever, whether based in contract, tort, warranty, or other legal, statutory, or equitable theory of recovery, which relate to or arise out of the Releasors use of or presence in and/or on judicial property. The Releasors agree to defend, indemnify and hold harmless the Releases from (a) any and all claims, loss, liability, damages or costs by any person, firm, corporation or other entity claiming by, through or under Releasors in any capacity whatsoever, including all subrogation claims and/or claims for reimbursement, including any court costs and attorneys fees, that may incur due to Releasors use of or presence in and on judicial property; and (b) any and all legal actions, including third-party actions, cross-actions, and/or claims for contribution and/or indemnity with respect to any claims by any other persons, entities, parties, which relate to or arise out of Releasors use of or presence in and on judicial property.

The Releasors acknowledge the risks that may be involved and hazards connected with use of or presence in and on judicial property but elect to provide services under any contract with the AOSC with full knowledge of such risks. Releasors also acknowledge that any loss, damage, and/or injury sustained by Releasors are not covered by Releases insurance. Releasors agree to become fully aware of any safety risks involved with the performance of services under any contract with the AOSC and any safety precautions that need to be followed and agree to take all such precautions.

The duty to indemnify and/or hold harmless the AOSC shall not be limited by the insurance required under the Judicial Terms and Conditions of Purchase.

4.0 Additional Insurance Requirements

In addition to the insurance provisions in the Judicial Terms and Conditions of Purchase, the liability insurance coverage, except Professional Liability, Errors and Omissions or Workers' Compensation insurance required for performance of a contract with the AOSC shall include the AOSC, its divisions, officers and employees as Additional Insureds but only with respect to the selected vendor's activities under the contract. The insurance required through a policy or endorsement shall include:

a. a Waiver of Subrogation waiving any right to recovery the insurance company may have against the AOSC; and

b. a provision that the selected vendor's insurance coverage shall be primary with respect to any insurance, self insurance or self retention maintained by the State on behalf of the AOSC and that any insurance, self insurance or self retention maintained by the State on behalf of the AOSC shall be in excess of the selected vendor's insurance and shall not contribute.

There shall be no cancellation, material change, potential exhaustion of aggregate limits or non-renewal without thirty (30) days written notice from the selected vendor or its insurer(s) to the Judiciary's Purchasing Agent. Any failure to comply with the reporting provision of this clause shall be grounds for immediate termination of the contract with the Judiciary.

Insurance coverage required under the contract shall be obtained from insurance companies acceptable to the Judiciary. The selected vendor shall pay for all deductibles, self insured retentions and/or self insurance included hereunder.

The Judiciary's Purchasing Agent reserves the right to consider and accept alternative forms and plans of insurance or to require additional or more extensive coverage for any individual requirement.

5.0 Proposal Content and Organization

Pricing must include all costs as specified in Section 2.0 – Scope of Work. Pricing for this proposal must be indicated on the Bid Form in Section 9.0 **and must be submitted in a separate, sealed envelope marked with the words "Pricing Proposal".** Only one pricing proposal needs to be submitted. All Bid Forms must be signed.

The Bid Form must specify the amount of the percentage (%) over the Contractor's cost of materials (cost of materials + percentage markup = AOSC cost) that will be extended to the AOSC.

Vendors must include on the Bid Form a list of at least four (4) references with whom they have contracted to do similar work by including the company name, telephone number and a contact person.

Respondents must also include an overview of their company's experience including, but not limited to, the number of years the company has been providing these services, the size of the company (including the number of employees and locations), a description of work undertaken that is similar to what is being requested in this RFP, and certifications that show a knowledge of equipment that would be serviced under this contract.

Five (5) copies of your proposal must be submitted at the time of submission. Proposals must be in the following format:

Bid Form
Company overview
All licensing, certification and permits as required in the Scope of Work

Submission of a proposal is acknowledgement and acceptance of the Judicial Purchasing Rules and Regulations and General Terms and Conditions of Purchase.

6.0 Security

During this contract, security measures will be in place at all court locations. The Vendor, its officers, agents, servants and employees shall comply with all security measures in place at each courthouse location, including processing through metal detectors, background checks, and signing the vendor log book at each courthouse upon entry. It is the Vendor's responsibility to inquire with the AOSC's Director of Security as to what security measures apply to the services to be provided under a contract awarded pursuant to this RFP and to advise its officers, agents, servants and employees accordingly. There will be no exceptions.

Upon award the Vendor shall provide the AOSC's Director of Security with complete, notarized BCI Authorization and Disclaimer forms (Appendix A) for all of its officers, agents, servants and employees who may provide services pursuant to this RFP ("Personnel"). The forms must be accompanied by copies of a valid driver's license and any other personal identifying information requested by the AOSC, such as date of birth and/or social security number. All Personnel must be cleared by the AOSC Security Personnel before performing any services under a contract awarded pursuant to this RFP. Personnel who are not on the list shall not, under any circumstances, be sent to perform such services. It will be the responsibility of the Vendor to immediately inform the AOSC's Director of Security of any personnel changes.

Courthouse deliveries are only permitted between the hours of 10:00 AM and 2:00 PM Monday through Friday, unless other arrangements are made in advance. Packages will be inspected upon delivery.

No parking will be provided to the Vendor by the AOSC except limited temporary parking for the delivery and pick up of supplies.

7.0 Evaluation Criteria

The AOSC reserves the right to award on the basis of cost alone, accept or reject any or all proposals, and to otherwise act in its best interest including, but not limited to, directly negotiating with any Supplier who submits a proposal in response to this RFP and to award a contract for these services based upon the results of those negotiations alone.

Proposals found to be technically or substantially non-responsive at any point in the evaluation process will be rejected and not considered further. The AOSC may elect to require presentations(s) by vendors in consideration for award.

Proposals will be evaluated in two (2) phases:

1. The first phase is an initial review to determine if the proposal, as submitted, is complete. To be complete, a proposal must meet all the requirements of this RFP.
2. The second phase is an in-depth analysis and review based on criteria below and their associated weights.

Evaluation Criteria	Importance
Ability to Meet Specifications	40%
Price	35%
Experience	25%

8.0 Miscellaneous

The AOSC reserves the right to cancel an agreement with the Vendor with thirty (30) days written notice and to award the contract to the next highest evaluated bidder.

The AOSC reserves the right to renegotiate the terms of this contract with the Vendor for subsequent years provided the Vendor agrees to the contract terms for the renewal period.

The payment and performance of any obligations under this contract for years beyond the first fiscal year are subject to the availability of funds.

It is the responsibility of all bidders to visit and familiarize themselves with each location so as to respond accurately to this RFP. Site visits may be arranged by contacting the Project Coordinator at the phone numbers listed below:

9.0 Bid Form

Project: B2011019 –Boiler Plant and CHW Pump Replacement Project – Murray Judicial Complex

Date: _____ Submitted By: _____

Address: _____

Telephone:_____ Email: _____

Will any of the work contained in this bid be outsourced? _____Yes _____No

If yes, please explain: _____

_____

General Information

Have you or your firm been subject to suspension, debarment or criminal conviction by the AOSC, the Judiciary, the State of Rhode Island, or any other jurisdiction? _____Yes _____No

Has the AOSC, the Judiciary and/or the State of Rhode Island ever terminated contracts with your firm for cause? _____Yes _____No

Has your firm ever withdrawn from a contract with the AOSC, the Judiciary and/or the State of Rhode Island during its performance? _____Yes _____No

Have you or your firm been involved in litigation against the AOSC, the Judiciary and/or the State of Rhode Island? _____Yes _____No

If you answered yes to any of the foregoing, please explain the circumstances below. If you or your firm has been involved in litigation against the AOSC, the Judiciary and/or the State of Rhode Island, please include the case caption, case number and status. (If more space is needed, please attach separate sheet and submit with the bid.)

Is your company bonded? Yes _____ No _____

Please describe the nature and extent of all insurance coverage:

Addenda

The following Addenda have been received. The noted modifications to the Bidding Documents have been considered and all costs are included in the Bid Sum.

Addendum #1, Dated:_____

Addendum #2, Dated:_____

Addendum #3, Dated:_____

References

Please list at least four (4) companies' with whom you have contracted to provide similar services:

Reference #1

Company Name:_____

Contact Person:_____ Telephone #: _____

Contract Dates: _____ To _____

Reference # 2

Company Name:_____

Contact Person:_____ Telephone #: _____

Contract Dates: _____ To _____

Reference # 3

Company Name:_____

Contact Person:_____ Telephone #: _____

Contract Dates: _____ To _____

Reference # 4

Company Name:_____

Contact Person:_____ Telephone #: _____

Contract Dates: _____ To _____

Pricing

B2011019

Pricing must be submitted in a separate, sealed envelope marked with the words " Pricing Proposal".

Only one pricing proposal needs to be submitted.

Having examined bid # B2011019, we propose to enter into a contract to perform services per the bid specifications for the costs listed below:

$ ___ , ___ , ___ . ___

Numeric

_____

Written

Bid Form Signature

_____

(Bidder Name – Please Print)

By:_____

(Signature)

Title:_____

Appendix A

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ADMINISTRATIVE OFFICE OF STATE COURTS
250 BENEFIT STREET
PROVIDENCE, RHODE ISLAND 02903
TEL: 401-222-6700
FAX: 401-222-4740

CRIMINAL BACKGROUND INVESTIGATION AUTHORIZATION, RELEASE AND DISCLAIMER

I, _____, hereby direct and authorize the Bureau of Criminal Identification of the Department of Attorney General for the State of Rhode Island to make available to the Rhode Island Administrative Office of State Courts any criminal record that the Bureau of Criminal Identification has on file in reference to me, and I further consent to the authentication of my identity through fingerprinting, or some other process that may be required to confirm my identity.

I understand that an investigative report may be generated on me that may include information as to my criminal history records from any criminal justice agency in any or all federal, state, city and county jurisdictions, including any state Department of Motor Vehicle/Drivers' License Records, traffic citations and/or registrations.

I hereby waive and release any and all manner of actions, cause of actions, and demands of every kind, nature and description, arising from any release of criminal records and requests therefrom, whatsoever against the State of Rhode Island, the Rhode Island Administrative Office of State Courts, the Bureau of Criminal Identification, the Attorney General, and the employees of the Attorney General's Office, in both law and equity which I may now have or that may arise in the future.

_____ Employee Name (Please Print)

_____ Employee Signature

_____ Maiden Name (If Applicable)

_____ Date

_____ Date of Birth

_____ Employer/Company Name (If applicable)

_____ Place of Birth

_____ Social Security Number

Sworn to before me in the City/Town of _____, State of Rhode Island, this _____ day of _____, 20_____.

_____ Notary Public (Print Name)

Commission expires on _____.

_____ Notary Public (Signature)

Project Name: _____

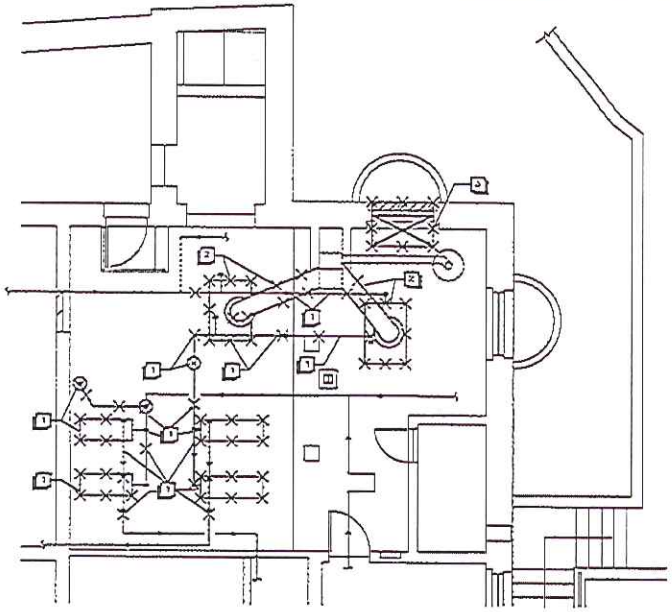
Project # _____ Date of Bid/RFP Specifications _____

Copy of valid photo identification with date of birth must be attached to all BCI Authorization Forms.

BCIF 08/08

Appendix B

See Attached for specifications and drawings

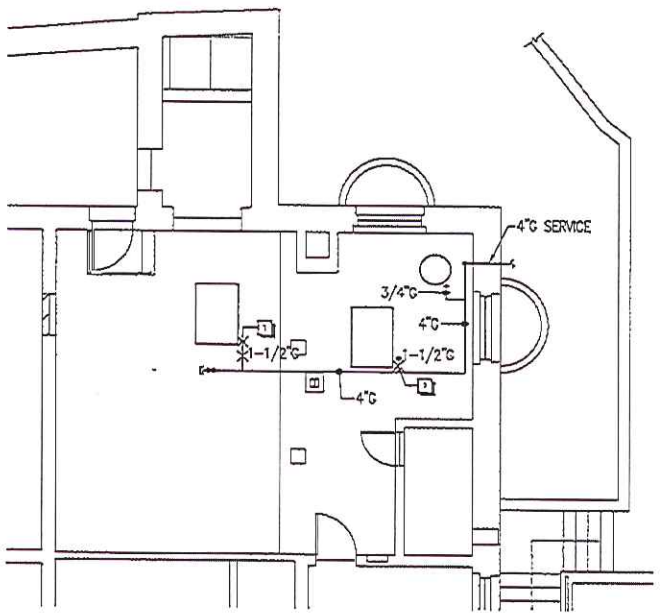


MECHANICAL ROOM PART PLAN - DEMOLITION

SCALE: 1/4" = 1'-0"

DEMOLITION KEYED NOTES:

1. REMOVE AND DISCARD PUMPS, PIPING, AND ALL ASSOCIATED APPURTENANCES COMPLETELY. WORK SHOWN MARKED WITH "R" INDICATES ITEMS TO BE REMOVED. REMOVE ALL PUMP CONNECTIONS, VALVES AND PIPEWORK FROM WITHIN BOILER.
2. REMOVE AND DISCARD EXISTING BOILERS, TRIM AND ALL ASSOCIATED APPURTENANCES COMPLETELY.
3. REMOVE AND DISCARD EXISTING WALL LOUVER AND PATCH WITH 12 GA GALVANEAL. PROVIDE 4" OF RIGID INSULATION ON THE INTERIOR OF THE 12 GA GALVANEAL BLANK OFF PLATE. PROVIDE LOUVER FOR CO, NOX CONSCIOUS VENTS FOR BOILERS. CONTRACTOR TO CONFIRM THAT THE INSULATION USED MEETS NFPA REQUIREMENTS FOR FLAME AND SMOKE AROUND BOILER VENTING.



MECHANICAL ROOM PART PLAN - GAS PIPE DEMOLITION

SCALE: 1/4" = 1'-0"

DEMOLITION KEYED NOTES:

1. SHUT OFF AND DISCONNECT GAS LINE DROP TO MAIN AND CAP.

MECHANICAL
ENGINEERING
PIPING INSTALLATION

HVAC+ELECTRICAL
SYSTEMS DESIGN
PIPING INSTALLATION

AD ORMOS Mechanical
5690 PROVINCIAL POINTE
P: 905.654.7734
F: 905.654.7676
INFO@ADORMOS.COM

Project

BOILER REPLACEMENT AT THE FLORENCE K. MURRAY JUDICIAL COMPLEX
45 WASHINGTON SQUARE
NEWPORT, RI 02842

Status

CONSTRUCTION DRAWINGS

No.	For Mtn Date	Date

Sheet Title

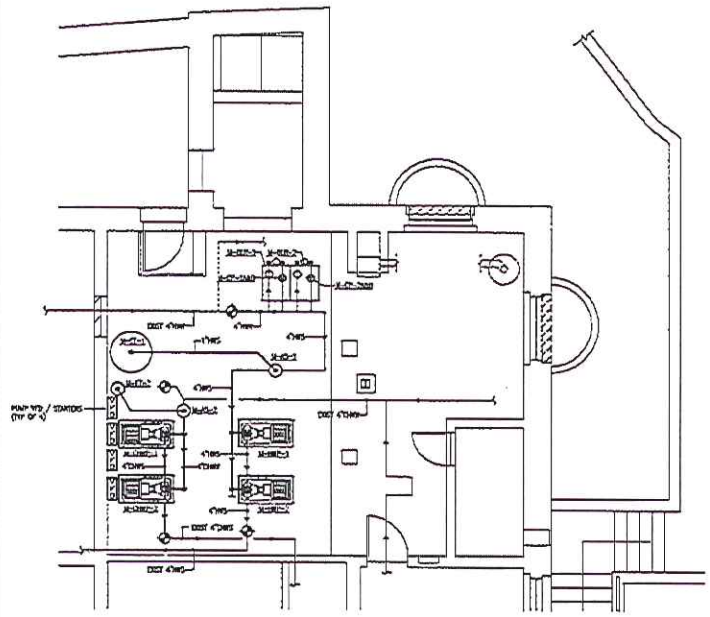
MECHANICAL ROOM DEMOLITION PLANS

Project No:	201197
Drawn By:	JPS
Checked By:	RCN
Scale:	AS NOTED
Date:	10/24/19

Drawing No:

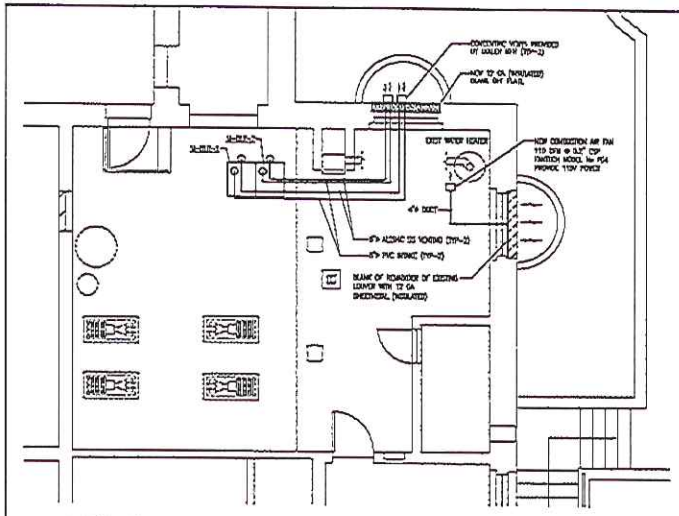
M-1

CEC No. 201197



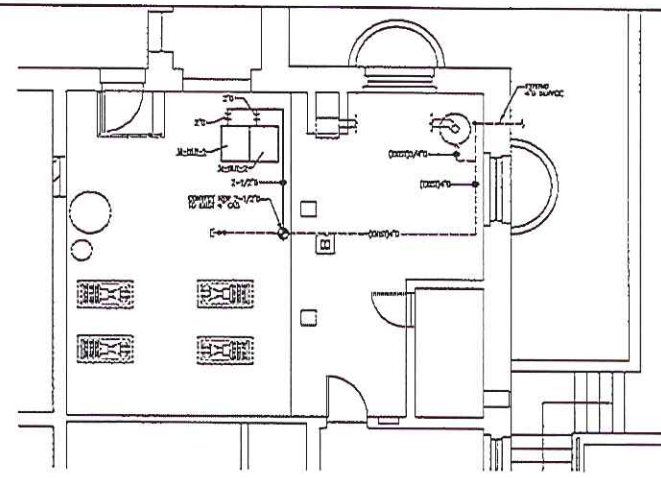
MECHANICAL ROOM PART PLAN - NEW WORK

SCALE: 1/4" = 1'-0"



MECHANICAL ROOM PART PLAN - BOILER VENTING NEW WORK

SCALE: 1/4" = 1'-0"



MECHANICAL ROOM PART PLAN - GAS PIPE NEW WORK

SCALE: 1/4" = 1'-0"

HVAC/PLUMBING/ELECTRICAL
PROJECT MANAGEMENT
PROJECT MANAGEMENT
CAN PROMOTION, HEALTH
P-401.434.7733
F-401.434.7733
WWW.CPCHEALTHPRO.COM

Project
BOILER REPLACEMENT
AT THE
FLORENCE K. MURRAY
JUDICIAL COMPLEX
45 WASHINGTON SQUARE
NEWPORT, RI 02842

Status
CONSTRUCTION DRAWINGS

No.	Revision Issue	Date

Sheet Title:
MECHANICAL ROOM NEW WORK PLANS

Project No:	201197
Drawn by:	JPB
Checked by:	RCN
Scale:	AS NOTED
Date:	10-14-11

Drawing No:
M-2

CEC No. 201197

BOILER SCHEDULE

TAG NO.	LOCATION	INPUT CAPACITY (NET RTG) MBH	OUTPUT CAPACITY (NET RTG) MBH	FUEL INLET PRESSURE (MIN. – MAX) IN WC	OPERATING PRESSURE (PSIG)	WATER FLOW (GPM)	WATER ΔT	WATER PD @ FLOW	WATER VOL (GAL)	ELECTRICAL DATA AMPS	V	PH	HZ	WEIGHT (LBS)	MANUFACTURER MODEL NUMBER	REMARKS
M-BLR-1	BASEMENT MECH ROOM	999	941	5.0 – 14	30	145	150	32/84	15	15	115	1	60	500	LOCHINVAR SCN1000	–
M-BLR-2	BASEMENT MECH ROOM	999	941	5.0 – 14	30	145	150	32/84	15	15	115	1	60	500	LOCHINVAR SCN1000	–
PROVIDE FACTORY PROVIDED ACID NEUTRALIZER KIT AND SIDEWALL VENTING KIT																

AIR SEPERATOR SCHEDULE

TAG NO.	LOCATION	SERVICE	CAPACITY (GAL)	PIPE SIZE	DIMENSIONS	PRESSURE DROP (@ FT/HD)	MANUFACTURER'S MODEL NUMBER	WEIGHT (LBS.)	REMARKS
M-AS-1	MECHANICAL ROOM	HWS	150	4"	4"	0.8	SPIROTHERM MODEL No. VSR-400	720	–
M-AS-2	MECHANICAL ROOM	CWS	240	4"	3"	0.6	SPIROTHERM MODEL No. VSR-600	900	–

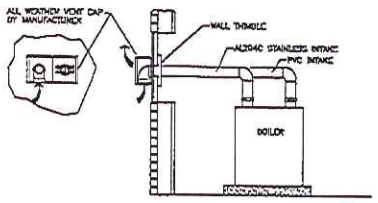
EXPANSION TANK SCHEDULE

TAG NO.	LOCATION	SERVICE	SYS TEMP (°F) MIN	SYS TEMP (°F) MAX	SYS PRESS (PSIG) MIN	SYS PRESS (PSIG) MAX	TANK VOLUME (GAL)	TANK ACCEPTANCE VOLUME (GAL)	TANK AIR CHARGE (PSIG)	MANUFACTURER MODEL NUMBER	REMARKS
M-ET-1	MECHANICAL ROOM	HEATING	45	200	12	30	92	43	12	TACO MODEL No. EXP30	–
M-ET-2	MECHANICAL ROOM	CHILLED	45	90	12	30	34	19	12	TACO MODEL No. EA140	–

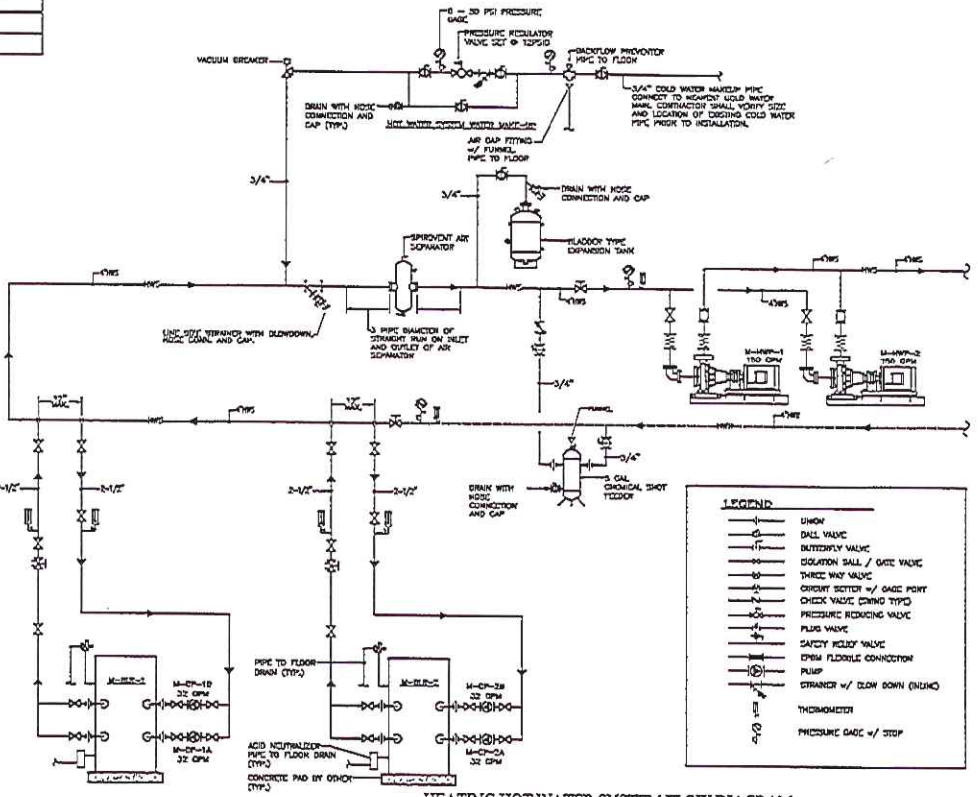
PUMP SCHEDULE

BASED ON TACO

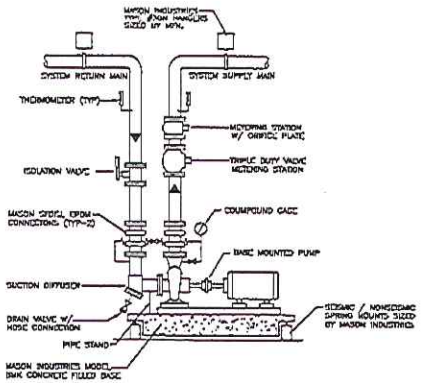
UNIT No.	SYSTEM SERVED	MODEL No.	GPM	HEAD (FT)	MOTOR DATA HP	MOTOR DATA RPM	MOTOR DATA VOLTAGE	NOTES
M-CP-1A&B	BOILERS	1611	32	15	1/4	1750	115/1Ø	2 PUMPS
M-CP-2A&B	BOILERS	1611	32	15	1/4	1750	115/1Ø	2 PUMPS
M-HWP-1&2	HEATING HOT WATER	FI1509	150	30	3	1750	460V/3Ø	2 PUMPS
M-CHWP-1&2	CHILLED WATER	FI2517	240	100	10	1750	460V/3Ø	2 PUMPS
PROVIDE "GRANGE PETT" CTNA MOTOR GUARDS ON HWP-1&2 AND CHWP-1&2.								



SEALED COMBUSTION VENTING DETAIL
NO SCALE



HEATING HOT WATER SYSTEM FLOW DIAGRAM
NTS



BASE MOUNTED PUMP PIPING DETAIL
NONCALE

BOILER REPLACEMENT AT THE FLORENCE M. MURRAY JUDICIAL COMPLEX
45 WASHINGTON SQUARE NEWPORT, RI 02842

CONSTRUCTION DRAWINGS

Sheet Title: SYSTEM DIAGRAM, SCHEDULES & DETAILS MECHANICAL

Project No: 201197
Drawn By: JML
Checked By: RGN
Scale: AS NOTED
Date: 10-14-11

Drawing No: M-3

CEC No. 201197

HEATING, VENTILATING, AND AIR CONDITIONING SPECIFICATIONS

PART 1 – GENERAL PROVISIONS FOR MECHANICAL WORK

1.01 GENERAL REQUIREMENTS

A. SCOPE OF WORK SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TRANSPORTATION, HOISTING, RIGGING, INSURANCE, ETC., TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND HEREIN SPECIFIED FOR A COMPLETE INSTALLATION. ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL, STATE AND LOCAL CODES AND ORDINANCES HAVING JURISDICTION, AS INTERPRETED BY THE ENGINEER.

B. APPLY AND PAY FOR ALL NECESSARY INSPECTION FEES, LICENSES AND PERMITS REQUIRED BY THE PROPER AUTHORITIES HAVING JURISDICTION.

C. THE BUILDING WILL BE OCCUPIED DURING ALL OF THE CONSTRUCTION PROCESS. THE CONSTRUCTION SCHEDULE SHALL BE DEVELOPED WITH THE UNDERSTANDING THAT THE BUILDING IS OCCUPIED AND THAT IT CAN NEITHER BE CLOSED NOR CAN THE OWNER'S OPERATIONS STOP.

D. NO EXITS SHALL BE CLOSED WITHOUT THE WRITTEN PERMISSION OF THE OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION.

E. ANY UTILITY OUTAGES OR SYSTEM SHUTDOWNS FOR CONSTRUCTION SHALL BE SCHEDULED WITH THE OWNER PRIOR TO COMMENCING OF WORK.

F. SUBMIT SHOP DRAWINGS OF ALL HVAC EQUIPMENT AND RECORD DRAWINGS FOR ALL WORK PROVIDED UNDER THIS CONTRACT TO THE ENGINEER/OWNER FOR HIS USE PRIOR TO ORDERING, FABRICATING OR INSTALLING SAME.

G. ALL MATERIALS SHALL BE NEW. ALL EQUIPMENT SHALL BEAR THE U.L. LABEL.

H. RECORD DRAWINGS: THE CONTRACTOR SHALL KEEP DAILY UPDATED ACCURATE RECORDS OF ALL DEVIATIONS IN WORK AS ACTUALLY INSTALLED FROM WORK INDICATED ON THE CONTRACT DRAWINGS. THE RECORD DRAWINGS SHALL BE KEPT AT THE JOB SITE, AVAILABLE TO THE OWNER AT ALL TIMES AND LABELED AS "PROJECT RECORD INFORMATION – JOB SET". WHEN WORK IS COMPLETED THIS CONTRACTOR SHALL PROVIDE TO THE OWNER ONE COMPLETE SET OF MARKED-UP ORIGINAL PRINTS, UPDATED CAD DRAWINGS AND A CD WITH CAD FILES.

1.02 GUARANTEES

A. ALL WORK, MATERIALS AND EQUIPMENT SHALL BE GUARANTEED AGAINST DEFECTS RESULTING FROM THE USE OF INFERIOR MATERIALS, EQUIPMENT, OR WORKMANSHIP FOR ONE YEAR FROM THE DATE OF FINAL COMPLETION OF THE CONTRACT, OR FROM FULL ACCEPTANCE BY THE OWNER, WHICHEVER IS EARLIER. ALL DEFECTIVE MATERIAL OR WORKMANSHIP AS WELL AS DAMAGES TO THE WORK OF ALL TRADES RESULTING FROM SAME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

B. THE GUARANTEE PERIOD SHALL BE FOR TWO (2) HEATING SEASONS FROM THE DATE OF ACCEPTANCE, WHICH SHALL BE THE DATE OF FINAL PAYMENT OR THE DATE OF FORMAL NOTICE OF ACCEPTANCE, WHICHEVER IS EARLIER.

C. CERTIFICATION SHALL BE SUBMITTED BY THE CONTRACTOR ATTESTING TO THE FACT THAT SPECIFIED PERFORMANCE CRITERIA ARE MET BY ALL EQUIPMENT.

D. IF, WITHIN ANY GUARANTEE PERIOD, REPAIRS OR CHANGES TO GUARANTEED WORK ARE REQUIRED AS A RESULT OF THE USE OF DEFECTIVE MATERIALS OR EQUIPMENT, INFERIOR WORKMANSHIP OR WORK THAT IS NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT, AND UPON RECEIPT OF NOTICE FROM THE OWNER, THE FOLLOWING SHALL BE DONE WITHOUT EXPENSE TO THE OWNER:

1. REPAIR ALL DAMAGE TO THE BUILDING OR SITE/EQUIPMENT OR CONTENTS THEREOF WHICH IS THE RESULT OF THE USE OF DEFECTIVE MATERIALS OR EQUIPMENT OR INFERIOR WORKMANSHIP, OR OF WORK NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT.

2. MAKE GOOD ANY WORK OR MATERIALS, OR THE EQUIPMENT AND CONTENTS OF SAID BUILDING OR SITE DISTURBED IN FULFILLING ANY SUCH GUARANTEE.

E. IN FULFILLING THE REQUIREMENTS OF THE CONTRACT OR OF ANY GUARANTEE EMBRACED IN OR REQUIRED THEREBY, ANY WORK GUARANTEED UNDER ANOTHER CONTRACT IS DISTURBED, RESTORE SUCH DISTURBED WORK TO ORIGINAL CONDITION AND GUARANTEE SUCH RESTORED WORK TO THE SAME EXTENT AS IT WAS GUARANTEED UNDER SUCH OTHER CONTRACT.

F. IF UPON FAILURE TO PROCEED PROMPTLY AFTER NOTICE TO COMPLY WITH THE TERMS OF THE GUARANTEE, THE OWNER MAY HAVE THE DEFECTS CORRECTED AND CONTRACTOR AND HIS SURETY SHALL BE LIABLE FOR ALL EXPENSES INCURRED.

1.03 CONTRACTORS RESPONSIBILITIES

A. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY INJURIES TO PEOPLE, EMPLOYEES OR DAMAGE DONE TO BUILDING PREMISES OR ADJOINING AREAS OR TO OTHER WORK RESULTING FROM EXECUTION ON HIS PART OF WORK, IN ANY MANNER WHATSOEVER.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PROTECTION OF HIS WORK, MATERIALS, PEOPLE OR EMPLOYEES FROM INJURY OR LOSS DONE BY OTHERS AND SHALL MAKE GOOD SUCH INJURY AT HIS OWN EXPENSE.

C. DRAWINGS DO NOT INDICATE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.

D. ENGINEER SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF CONTRACTORS' EMPLOYEES, MATERIALS OR EQUIPMENT.

1.04 COORDINATION AND INTERPRETATION OF DRAWINGS

A. THE CONTRACTOR, PRIOR TO SUBMITTING BID SHALL VISIT THE PROJECT SITE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND TO INSPECT THAT ALL PROVISIONS HAVE BEEN MADE FOR ALL ASPECTS OF THIS PROJECT.

B. IF DISCREPANCIES EXIST BETWEEN DRAWINGS AND/OR SITE CONDITIONS, THE HVAC CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE OWNER PRIOR TO SIGNING OF CONTRACT. REQUESTS FOR COMPENSATION FOR EXTRA WORK, WHICH WOULD HAVE BEEN EVIDENT BY COMPLIANCE WITH THE PREVIOUS STATEMENT, WILL NOT BE CONSIDERED.

C. MECHANICAL EQUIPMENT AND SUCH OTHER APPARATUS AS MAY REQUIRE MAINTENANCE AND OPERATION FROM TIME TO TIME SHALL BE MADE EASILY ACCESSIBLE. ALTHOUGH THE EQUIPMENT MAY BE SHOWN ON THE DRAWINGS IN CERTAIN LOCATIONS, THE CONSTRUCTION MAY DISCLOSE THAT SUCH LOCATIONS DO NOT MAKE ITS POSITION READILY ACCESSIBLE. IN SUCH CASES, THE OWNER OR HIS REPRESENTATIVE SHALL BE NOTIFIED BEFORE ADVANCING THE CONSTRUCTION TO A STAGE WHERE A CHANGE WILL REQUIRE ADDITIONAL EXPENSE.

D. IT SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR TO STUDY ALL DRAWINGS AND DETAILS SO THAT THE INSTALLATION OF ALL NEW WORK CAN BE FULLY COORDINATED. COORDINATE WITH ALL TRADES TO AVOID INTERFERENCE OF EQUIPMENT.

E. HVAC WORK IS INDICATED DIAGRAMMATICALLY. EXACT LOCATION OF ALL COMPONENTS ARE TO BE DETERMINED IN THE FIELD AND BY THE ACTUAL BUILDING CONDITIONS. EQUIPMENT, DUCTS OR PIPES INTERFERING WITH OTHER INSTALLATIONS SHALL BE RELOCATED AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

1.05 DEMOLITION

A. ALL DEMOLITION OF INACTIVE HVAC SYSTEMS WITHIN THE CONTRACT LIMITS SHALL BE BY THE GENERAL CONTRACTOR. EACH BIDDER FOR WORK UNDER THIS SECTION OF THE SPECIFICATION SHALL INCLUDE IN HIS BID ALL COSTS INVOLVED IN DISCONNECTING ALL PIPING, DUCTWORK AND UNUSED CONTROL WIRING SERVING EXISTING HVAC EQUIPMENT THAT IS TO BE REMOVED. COORDINATE ALL SHUTDOWN OF EXISTING SYSTEMS AS REQUIRED, WITH THE OWNER, THROUGH THE GENERAL CONTRACTOR.

B. CONTRACTOR SHALL VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DEFICIENCIES THAT WILL AFFECT WORK OF THIS SECTION. DEMOLITION WORK WILL REQUIRE CAREFUL SITE EXAMINATION PRIOR TO BIDDING.

C. PRIOR TO COMMENCING DEMOLITION, CONTRACTOR SHALL IDENTIFY WITH OWNER ANY EQUIPMENT TO BE RETURNED TO THE OWNER AFTER DEMOLITION. ALL OTHER ITEMS SHALL BE DISPOSED OF BY THIS CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

D. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISCONNECTION AND REMOVAL OF THE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, VALVES, ETC., IN DESIGNATED AREAS. CUT & CAP PIPING & DUCTWORK BACK TO MAINS.

E. THIS CONTRACTOR SHALL PROTECT WORK AGAINST INJURY OR DAMAGE AND CAREFULLY STORE MATERIAL AND EQUIPMENT TO BE RELOCATED. OPEN ENDS OF WORK SHALL BE CLOSED WITH TEMPORARY COVERS OR PLUGS DURING STORAGE AND CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL.

1.06 EQUIPMENT

A. PRODUCTS REQUIRED BY CONSTRUCTION BUT NOT SPECIFICALLY DESCRIBED HEREIN SHALL BE AS SELECTED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER.

B. PROVIDE ALL MATERIALS, LABOR, AND ACCESSORIES FOR A COMPLETE AND OPERABLE SYSTEMS AND AS REQUIRED BY THE EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS.

C. PROVIDE ALL HANGERS AND SUPPORTS AS REQUIRED TO SUPPORT ALL NEW PIPING AND EQUIPMENT.

D. MOTORS: 1.5 HP MOTORS SHALL BE RATED AT 90% POWER FACTOR AT FULL RATED LOAD. 40 HP MOTORS SHALL BE RATED AT 90% POWER FACTOR AT FULL RATED LOAD. ALL MOTORS SHALL BE RATED PREMIUM EFFICIENCY. MOTORS USED WITH VARIABLE FREQUENCY DRIVES SHALL BE RATED FOR INVERTER DUTY.

E. DISCONNECTS PROVIDED BY THIS CONTRACTOR WILL BE INSTALLED BY ELECTRICAL CONTRACTOR, WITH THE EXCEPTION OF FACTORY MOUNTED DISCONNECTS.

1.07 EXECUTION

A. ALL ROUGH CUTTING, CORE DRILLING AND PATCHING REQUIRED FOR INSTALLATION OF THE MECHANICAL SYSTEM SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. ALL FINISH PATCHING RELATIVE TO THIS CONTRACTOR'S WORK SHALL BE THE RESPONSIBILITY OF OTHER TRADES IN ACCORDANCE WITH OTHER SECTIONS OF THIS SPECIFICATION. COORDINATE ALL WORK FOR A COMPLETE AND FINISHED INSTALLATION.

B. INSTALL ALL MATERIALS, ACCESSORIES AND EQUIPMENT ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR A COMPLETE AND OPERABLE SYSTEMS AS INDICATED ON THE DRAWINGS MANUFACTURERS INSTRUCTIONS.

C. INSTALLATION OF THE HVAC SYSTEM SHALL PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT OF NEW AND EXISTING EQUIPMENT.

D. ALL MISCELLANEOUS STRUCTURAL SUPPORTS REQUIRED FOR HVAC EQUIPMENT INSTALLATION SHALL BE PROVIDED BY MECHANICAL CONTRACTOR.

E. CONTRACTOR TO DRAIN, FLUSH, FILL AND BALANCE ALL SYSTEMS AS NEEDED TO COMPLETE THE WORK. DRAINING SHALL ONLY OCCUR IN THE BOILER ROOM AND NOT THE ENTIRE BUILDING.

1.08 EQUIPMENT, VALVE, AND PIPE IDENTIFICATION

A. AVAILABLE MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PRODUCTS ARE LIMITED TO SETON, BRADY OR BRIMAR WHOM HAVE A MINIMUM OF 5 YEARS EXPERIENCE IN THE MANUFACTURING OF MECHANICAL IDENTIFICATION PRODUCTS.

B. PLASTIC PIPE MARKERS

1. SNAP-ON TYPE: PROVIDE MANUFACTURER'S STANDARD PRE-PRINTED, SEMI-RIGID SNAP-ON, COLOR-CODED PIPE MARKERS, COMPLYING WITH ANSI A13.1.

2. FOR EXTERNAL DIAMETERS LESS THAN 6" (INCLUDING INSULATION IF ANY), PROVIDE FULL-BAND PIPE MARKERS, EXTENDING 360 DEGREES AROUND PIPE AT EACH LOCATION, FASTENED BY SNAP-ON APPLICATION OF PRE-TENSIONED SEMI-RIGID PLASTIC PIPE MARKER.

3. THE FOLLOWING DESCRIPTION AND COLORS SHALL BE USED FOR PIPING IDENTIFICATION WITH FLOW ARROWS UNLESS NOTED OTHERWISE:

LEGEND	SERVICE	COLOR
HWS	HEATING HOT WATER SUPPLY	YELLOW
HWR	HEATING HOT WATER RETURN	YELLOW
GAS	FUEL GAS	YELLOW

COLOR BANDING SHALL MEET LATEST EDITION OF NSI AND OSHA REQUIREMENTS.

C. WHERE HYDRONIC SYSTEMS HAVE BEEN BALANCED, THE CONTRACTOR SHALL PERMANENTLY MARK, ON THE DEVICE, THE CORRECT BALANCING SETTING OF EACH VALVE, DAMPER, OR SIMILAR DEVICE.

D. VALVE TAGGING AND VALVE CHART

1. USE BLACK LAMINATED PHENOLIC TAGS 2" IN DIAMETER WITH WHITE LETTERS 3/8" HIGH.

2. USE BRASS "S" HOOKS AND/OR BRASS CHAIN TO ATTACH TO VALVE.

3. USE PRINTING 1/8" HIGH FOR CHARTS.

4. PLACE CHARTS IN METAL FRAME WITH NON-GLARE GLASS.

E. EQUIPMENT IDENTIFICATION

1. USE BLACK LAMINATED PHENOLIC NAMEPLATES 6" LONG X 3" HIGH WITH WHITE INCISED LETTERING 3" HIGH. ATTACH TO EQUIPMENT WITH STAINLESS STEEL OR BRASS SCREWS, OR RIVETS.

PART 2 – EQUIPMENT

2.01 PIPING

A. HEATING / COOLING

1. PIPING 2-1/2" AND SMALLER SHALL BE SCHEDULE 40 BLACK STEEL WITH SCREWED FITTING OR TYPE L HARD COPPER SEAMLESS TUBE AS MANUFACTURED BY ANACONDA, REVERE, OR CHASE, WITH WROUGHT COPPER FITTINGS, SOLDERED WITH LEAD-FREE SOLDER. UNIONS OR FLANGES SHALL BE INSTALLED AT ALL CONNECTIONS TO ALL EQUIPMENT.

2. PIPING 3" AND LARGER SHALL BE SCHEDULE 40 BLACK STEEL WITH WELDED FITTINGS AND 150 LB. FLANGES.

B. UNIONS: USE DIELECTRIC UNIONS, FLANGES OR WATERWAYS TO CONNECT DISSIMILAR METAL PARTS.

2.02 PIPE HANGERS AND SUPPORTS

C. USE INSULATION PROTECTION SADDLES OR SHIELDS FOR ALL INSULATED PIPING AND WHERE HANGER IS OUTSIDE THE INSULATION. SECURE ALL SADDLES AND SHIELDS TO THE INSULATION TO PREVENT SLIPPAGE OR SHIFTING THAT MAY CAUSE THE SHIELD TO FALL TO THE GROUND. SADDLES SHALL BE SPOT WELDED TO HANGERS.

5. PIPE HANGERS AND SUPPORTS

1. CLEVIS TYPE HANGERS, GRINNELL, FIG. 260, SHALL BE USED EXCEPT AS OTHERWISE NOTED IN SECTION 15050 – VIBRATION ISOLATION AND SEISMIC RESTRAINT. SUPPORT PIPES FOUR INCHES AND OVER WITH GRINNELL, FIGURE 181 OR 171 ADJ., PIPE ROLL WITH PIPE COVERING PROTECTION SADDLE.

2. PERFORATED BAND IRON, WIRE, CHAIN OR OTHER PIPING SHALL NOT BE USED AS SUPPORTS NOR SHALL HANGER RODS PIERCE DUCTWORK.

3. USE COPPERIZED COMPONENT ON COPPER PIPE AND PVC COATED FOR PVC PIPE.

2.03 PIPING INSULATION

A. FIBERGLASS PIPE INSULATION SHALL BE BY OWENS CORNING TYPE 25L-F OR APPROVED EQUAL BY JOHNS MANVILLE OR CERTAINTEED. INSULATION SHALL HAVE FACTORY APPLIED ALL-SERVICE JACKET (ASJ) AND TWO-COMPONENT ADHESIVE CLOSURE SYSTEM, RATED FOR A MAXIMUM SERVICE TEMPERATURE OF 850°F. FOR LARGE PIPE SIZES WHERE SSL-II IS NOT AVAILABLE, THE SINGLE ADHESIVE SSL CLOSURE MAY BE SUBSTITUTED. CIRCUMFERENTIAL JOINTS SHALL BE SEALED BY BUTT STRIPS HAVING A TWO-COMPONENT SEALING SYSTEM.

1. PIPING 1-1/2" AND SMALLER SHALL HAVE A MINIMUM INSULATION THICKNESS OF 1".

2. PIPING LARGER THAN 1-1/2" SHALL HAVE A MINIMUM INSULATION THICKNESS OF 2".

3. INSULATION THICKNESS IS BASED ON A "K" VALUE NOT EXCEEDING 0.27 BTU PER INCH/HR·SQ.FT.·°F.

B. FITTINGS AND VALVES SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS FITTINGS. THICKNESS SHALL BE EQUAL TO ADJACENT PIPE INSULATION. FINISH SHALL BE WITH PRE-FORMED PVC FITTING COVERS.

C. FLANGES, COUPLINGS AND VALVE BONNETS SHALL BE COVERED WITH AN OVERSIZED PIPE INSULATION SECTION SIZED TO PROVIDE THE SAME INSULATION THICKNESS AS ON THE MAIN PIPE SECTION. AN OVERSIZED INSULATION SECTION SHALL BE USED TO FORM A COLLAR BETWEEN THE TWO INSULATION SECTIONS WITH LOW-DENSITY BLANKET INSULATION BEING USED TO FILL GAPS. JACKETING SHALL MATCH THAT USED ON STRAIGHT PIPE SECTIONS. WHERE FITTINGS ARE TO BE LEFT EXPOSED, INSULATION ENDS SHOULD BE BEVELED AWAY FROM BOLTS FOR EASY ACCESS.

2.04 VALVES AND SPECIALTIES

A. PROVIDE WHERE SHOWN ON THE DRAWINGS AND AT ALL HIGH POINTS IN THE PIPING, A SPIROTOP AUTOMATIC AIR VENT WITH SHUT-OFF. FURNISH TO THE GENERAL CONTRACTOR ACCESS PANELS AS MANUFACTURED BY MILCOR FOR EACH CONCEALED AIR VENT.

B. PROVIDE ALL REQUIRED VALVES FOR THE EQUIPMENT AS SHOWN ON THE PLANS AND AS REQUIRED FOR PROPER OPERATION OF THE EQUIPMENT. PROVIDE THROTTLING VALVES WHERE REGULATION OF FLOW IS NECESSARY OR DESIRABLE. CHECK VALVES WHERE REVERSE FLOW IS LIABLE UNDER ANY CONDITIONS AND SHUT-OFF VALVES ON ALL LINES CONNECTING TO ANY PIECE OF EQUIPMENT. ALL VALVES SHALL BE 125-LB. STANDARD CONSTRUCTION. VALVES SHALL BE BRONZE OR BRASS. VALVES 3" AND LARGER SHALL BE FLANGED ENDS. ALL VALVES SHALL HAVE THE NAME OR TRADEMARK OF THE MANUFACTURER AND GUARANTEED WORKING PRESSURE CAST ON THE BODY OF THE VALVE. ALL EQUIPMENT SHALL HAVE ISOLATION VALVES. ALL VALVES SHALL HAVE EXTENSIONS SUFFICIENT TO CLEAR INSTALLATION.

C. PROVIDE ALL VALVES OF THE SAME MANUFACTURER (STOCKHAM, FAIRBANKS, CRANE OR LUNKENHEIMER) OF TOP LINE, FIRST QUALITY.

D. CHECK VALVES SHALL BE OF THE HORIZONTAL SWING TYPE WITH BINDED CHECK, GROUND SEAT AND APPROVED TYPE DISCS.

E. GLOBE AND ANGLING VALVES USED FOR THROTTLING SERVICES SHALL BE OF THE PLUG TYPE WITH RENEWABLE SEATS AND DISCS. SEATS AND DISCS FOR PLUG TYPE VALVES SHALL BE OF APPROVED TYPE METAL ALLOY.

F. PROVIDE BALANCING VALVES, AS INDICATED ON THE DRAWINGS. BALANCING VALVES OVER 2" SHALL BE FLANGED; 2" AND UNDER SHALL BE SCREWED. BALANCING VALVES SHALL BE MANUFACTURED BY TOUR AND ANDERSON, MACON AND BELL AND GOSSETT.

2.05 EXPANSION TANK

A. EXPANSION TANK SHALL BE BLADDER TYPE ASME-RATED, 125 LBS. TESTED, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS COMPLETE WITH ALL NECESSARY AIR CHARGING AND DRAINING VALVES. TANKS SHALL BE MANUFACTURED BY TACO, BELL & GOSSETT OR AMTROL. PROVIDE DISCHARGE PIPING FROM TANK DRAIN VALVES TO FLOOR DRAINS.

2.06 AIR SEPARATOR (SPIROVENT – NO EXCEPTIONS)

A. FURNISH AND INSTALL, AS SHOWN ON THE DRAWINGS A SPIROVENT AIR ELIMINATION FITTING ON THE HOT WATER SYSTEM. ALL FITTINGS SHALL BE FABRICATED STEEL, RATED FOR 150 PSIG DESIGN PRESSURE AND SELECTED FOR LESS THAN 1 FOOT OF WATER PRESSURE DROP AND VELOCITY NOT TO EXCEED 4 FEET PER SECOND THROUGH THE UNIT AT SPECIFIED GPM. ALL UNITS SHALL INCLUDE AN INTERNAL COPPER BUNDLE OF SPIROTUBES TO ACT AS THE TURBULENCE SUPPRESSING COALESCING MEDIUM, WHICH MUST COMPLETELY FILL THE FITTINGS INTERNAL AREA. UNITS ARE TO REMOVE FREE AND ENTRAINED AIR DURING SYSTEM START UP AND CONTINUE TO ELIMINATE DISSOLVED AIR THROUGH CONTINUAL CIRCULATION AND THE COALESCING ACTION OF THE SPIROTUBES. EACH FITTING IS TO HAVE A SEPARATE AIR AND VENTING CHAMBER TO PREVENT SYSTEM CONTAMINANTS FROM HARMING THE FLOAT AND VENTING VALVE OPERATION. AT THE TOP OF THE VENTING CHAMBER SHALL BE AN INTEGRAL FLOAT ACTUATED BRASS AIR VENT. THERE SHALL BE NO RESTRICTION IN THE CONNECTION FROM THE VENTING CHAMBER TO THE VENT. THE FITTINGS ARE TO INCLUDE A VALVED SIDE TAP TO FLUSH FLOATING DIRT OR LIQUIDS AND FOR QUICK BLEEDING OF LARGE AMOUNTS OF AIR DURING SYSTEM FILL OR REFILL. UNITS SHALL INCLUDE A BOTTOM CONNECTION FOR USE AS BLOW DOWN CONNECTION FOR PERIODIC CLEANING. ONES SHALL BE SPIROVENT "DIRT" MODELS OF THE SIZE SHOWN ON DRAWINGS AND SCHEDULE.

2.07 PUMPS

A. PROVIDE PUMPS MANUFACTURED BY TACO OR ENGINEER APPROVED EQUAL BY BELL & GOSSETT OR PACO (PROVIDED THAT ALL SPECIFICATIONS ARE MET, PERFORMANCE & ACCESSORIES TO BE AS SCHEDULED ON PLANS.

B. PUMPS SHALL BE DESIGNED FOR OPERATION WITH 225°F WATER. PUMPS SHALL HAVE BRONZE FITTED CONSTRUCTION, INCLUDING CAST IRON CASINGS, BRONZE OR COPPER SHAFT SLEEVES, ALLOY STEEL SHAFTS AND BRONZE IMPELLERS. BEARINGS SHALL BE EITHER SLEEVE TYPE OR REGREASABLE BALL BEARINGS.

2.08 GAS PIPING

A. GAS PIPING SHALL BE SCHEDULE 40 CARBON STEEL, ASTM A53 GRADE B, A106 GRADE A OR A120.

B. ENTIRE GAS PIPING INSTALLATION SHALL BE IN ACCORDANCE WITH NATIONAL FIRE CODE NFPA 54 AND REGULATIONS OF NATIONAL GRID (GAS COMPANY). ALL GAS PIPING SHALL BE BRACED FOR SEISMIC CONDITIONS AS REQUIRED BY BUILDING CODE.

C. GAS VALVES SHALL BE GAS SERVICE UL LISTED PLUG/GAS COCK OR BALL VALVE, BOTTOM LOADED LOW PRESSURE STEM VALVE, RATED AT 600 PSI WOG, WATTS B-6000 OR EQUAL.

D. GAS PIPING SHALL PITCH TO DRAIN AND SHALL HAVE DRIP POCKETS AT LEAST 6" LONG WITH REMOVABLE CAPS AT LOW POINTS. BRANCH CONNECTIONS SHALL BE TAKEN FROM TOP OR SIDE OF HORIZONTAL RUNNING MAIN. PROVIDE GAS COCK OR VALVE ON CONNECTIONS TO FIXTURES OR EQUIPMENT. PROVIDE UNION CONNECTION BETWEEN SHUTOFF COCK AND EQUIPMENT TO PERMIT DISCONNECTION OF EQUIPMENT.

E. PIPING SHALL BE ADEQUATELY RESTRAINT AND SECURELY FASTENED, SEPARATELY HUNG AND SHALL NOT SUPPORT ANY OTHER WEIGHT OR PIPING. PIPING DROPPING ON CONCRETE BLOCK WALLS SHALL BE FACTORY WRAPPED FOR CORROSION PROTECTION.

F. VENTS: GAS VENT PIPING SHALL BE SCHEDULE 40 CARBON STEEL, ASTM A53 GRADE B, A106 GRADE A OR A120.

G. BEFORE EQUIPMENT IS CONNECTED, PROVE ENTIRE SYSTEM TO BE GAS TIGHT BY SOAP BUBBLE AND AIR TEST AT 45 PSIG AND PER NFPA 54. CORRECT ALL LEAKS.

2.09 BOILERS

A. THE BOILER SHALL BE A LOCHINVAR SYNC MODEL SBN 1000 AS SHOWN ON THE DRAWINGS AND SCHEDULES HEREIN. THE BOILER SHALL BE CAPABLE OF FULL MODULATION FIRING DOWN TO 10% OF RATED INPUT WITH A TURNDOWN RATIO OF 10:1.

B. THE BOILER SHALL BEAR THE ASME "H" STAMP FOR 160 PSI WORKING PRESSURE AND SHALL BE NATIONAL BOARD LISTED. THERE SHALL BE NO BANDING MATERIAL, BOLTS, GASKETS OR "O" RINGS IN THE HEADER CONFIGURATION. THE BOILER SHALL HAVE A 316L STAINLESS STEEL HEAT EXCHANGER. THE COMBUSTION CHAMBER SHALL BE DESIGNED TO DRAIN CONDENSATION TO THE BOTTOM OF THE HEAT EXCHANGER ASSEMBLY INCLUDING A CONDENSATE TRAP. THE COMPLETE HEAT EXCHANGER ASSEMBLY SHALL CARRY A TEN (10) YEAR LIMITED WARRANTY.

C. THE BOILER SHALL BE CERTIFIED AND LISTED BY C.S.A. INTERNATIONAL UNDER THE LATEST EDITION OF THE HARMONIZED ANSI Z21.13 TEST STANDARD FOR THE U.S. AND CANADA. THE BOILER SHALL COMPLY WITH THE ENERGY EFFICIENCY REQUIREMENTS OF THE LATEST EDITION OF THE ASHRAE 90.1 STANDARD AND THE MINIMUM EFFICIENCY REQUIREMENTS OF THE LATEST EDITION OF THE ASHRAE 103 STANDARD. THE BOILER SHALL OPERATE AT A MINIMUM OF 94% THERMAL EFFICIENCY AT FULL FIRE ON 1,000,000, 1,300,000 AND 1,500,000 BTU/HR MODELS. ALL MODELS SHALL OPERATE UP TO 98% THERMAL EFFICIENCY WITH RETURN WATER TEMPERATURES AT 90°F OR BELOW. THE BOILER SHALL BE CERTIFIED FOR INDOOR INSTALLATION.

D. THE BOILER SHALL BE CONSTRUCTED WITH A HEAVY GAUGE STEEL JACKET ASSEMBLY, PRIMED AND PRE-PAINTED ON BOTH SIDES. THE COMBUSTION CHAMBER SHALL BE SEALED AND COMPLETELY ENCLOSED, INDEPENDENT OF THE OUTER JACKET ASSEMBLY, SO THAT INTEGRITY OF THE OUTER JACKET DOES NOT AFFECT A PROPER SEAL. A BURNER/FLAME OBSERVATION PORT SHALL BE PROVIDED. THE BURNER SHALL BE A PREMIX DESIGN AND CONSTRUCTED OF HIGH TEMPERATURE STAINLESS STEEL WITH A WOVEN METAL FIBER OUTER COVERING TO PROVIDE MODULATING FIRING RATES. THE BOILER SHALL BE SUPPLIED WITH A GAS VALVE DESIGNED WITH NEGATIVE PRESSURE REGULATION AND BE EQUIPPED WITH A VARIABLE SPEED BLOWER SYSTEM, TO PRECISELY CONTROL THE FUEL/AIR MIXTURE TO PROVIDE MODULATING BOILER FIRING RATES FOR MAXIMUM EFFICIENCY. THE BOILER SHALL OPERATE IN A SAFE CONDITION AT A DERATED OUTPUT WITH GAS SUPPLY PRESSURES AS LOW AS 4 INCHES OF WATER COLUMN.

E. THE BOILER SHALL UTILIZE A 24 VAC CONTROL CIRCUIT AND COMPONENTS. THE CONTROL SYSTEM SHALL HAVE A LIQUID CRYSTAL TOUCH SCREEN DISPLAY FOR BOILER SET-UP, BOILER STATUS, AND BOILER DIAGNOSTICS. ALL COMPONENTS SHALL BE EASILY ACCESSED AND SERVICEABLE FROM THE FRONT OF THE JACKET. THE BOILER SHALL BE EQUIPPED WITH A TEMPERATURE/PRESSURE GAUGE; HIGH LIMIT TEMPERATURE CONTROL WITH MANUAL RESET; ASME CERTIFIED PRESSURE RELIEF VALVE SET FOR 80 PSI; OUTLET WATER TEMPERATURE SENSOR; RETURN WATER TEMPERATURE SENSOR; OUTDOOR AIR SENSOR, FLUE TEMPERATURE SENSOR; HIGH AND LOW GAS PRESSURE SWITCHES, LOW WATER CUT OFF WITH MANUAL RESET AND A CONDENSATE TRAP FOR THE HEAT EXCHANGER CONDENSATE DRAIN.

F. THE BOILER SHALL FEATURE THE "SMART TOUCH" CONTROL WITH A LIQUID CRYSTAL TOUCH SCREEN DISPLAY, PASSWORD SECURITY, OUTDOOR AIR RESET, PUMP DELAY WITH FREEZE PROTECTION, PUMP EXERCISE, DOMESTIC HOT WATER PRIORITIZATION AND PC PORT CONNECTION. THE BOILER SHALL HAVE CONTACTS FOR ANY FAILURES, RUNTIME CONTACTS AND DATA LOGGING OF RUNTIME, IGNITION ATTEMPTS AND FAILURES. THE BOILER SHALL ALLOW 0-10 VDC INPUT CONNECTION FOR BMS CONTROL AND HAVE BUILT-IN "CASCADE" TO SEQUENCE AND ROTATE WHILE MAINTAINING MODULATION OF UP TO EIGHT BOILERS WITHOUT UTILIZATION OF AN EXTERNAL CONTROLLER. THE CONTROL MAY BE COMPATIBLE WITH OPTIONAL MODBUS COMMUNICATION.

G. THE BOILER SHALL BE EQUIPPED WITH TWO TERMINAL STRIPS FOR ELECTRICAL CONNECTION. A LOW VOLTAGE CONNECTION BOARD WITH 30 DATA POINTS FOR SAFETY AND OPERATING CONTROLS, I.E., ALARM CONTACTS, RUNTIME CONTACTS, LOUVER PROVING SWITCH, TWO FLOW SWITCHES, TANK THERMOSTAT, REMOTE ENABLE/DISABLE (WALL THERMOSTAT/ZONE CONTROL), SYSTEM SUPPLY SENSOR, OUTDOOR SENSOR, TANK SENSOR, MODBUS BUILDING MANAGEMENT SYSTEM SIGNAL AND CASCADE CONTROL CIRCUIT. A HIGH VOLTAGE TERMINAL STRIP SHALL BE PROVIDED FOR SUPPLY VOLTAGE. SUPPLY VOLTAGE SHALL BE 120 VOLT / 60 HERTZ / SINGLE PHASE. THE HIGH VOLTAGE TERMINAL STRIP PLUS INTERNAL RELAYS ARE PROVIDED FOR INDEPENDENT PUMP CONTROL OF THE SYSTEM PUMP, THE BOILER PUMP AND THE DOMESTIC HOT WATER PUMP. THE SYSTEM PUMP AND BOILER PUMP DRY CONTACTS SHALL BE SIZED FOR UP TO 1.5 HP/120V, 3 HP/240V OR 30 AMP PUMPS.

H. THE BOILER SHALL BE INSTALLED AND VENTED WITH A DIRECT VENT SYSTEM WITH HORIZONTAL SIDEWALL TERMINATION OF BOTH THE EXHAUST VENT AND COMBUSTION AIR. THE FLUE SHALL BE CATEGORY IV APPROVED AL29-4C STAINLESS STEEL VENT MATERIAL TERMINATING AT THE SIDEWALL WITH THE MANUFACTURERS SPECIFIED VENT TERMINATION. A SEPARATE PIPE SHALL SUPPLY COMBUSTION AIR DIRECTLY TO THE BOILER FROM THE OUTSIDE. THE AIR INLET PIPE MAY BE PVC OR CPVC SEALED PIPE. THE BOILER'S TOTAL COMBINED AIR INTAKE LENGTH SHALL NOT EXCEED 100 EQUIVALENT FEET. THE BOILER'S TOTAL COMBINED EXHAUST VENTING LENGTH SHALL NOT EXCEED 100 EQUIVALENT FEET. THE AIR INLET MUST TERMINATE ON THE SAME SIDEWALL AS THE EXHAUST.

I. THE BOILER SHALL HAVE AN INDEPENDENT LABORATORY RATING FOR OXIDES OF NITROGEN (NOx) OF 20 PPM OR LESS CORRECTED TO 3% O2. THE MANUFACTURER SHALL VERIFY PROPER OPERATION OF THE BURNER, ALL CONTROLS AND THE HEAT EXCHANGER BY CONNECTION TO WATER AND VENTING FOR A FACTORY FIRE TEST PRIOR TO SHIPPING.

2.10 VARIABLE SPEED DRIVES (VFD)

A. PROVIDE VFD FOR HOT WATER AND CHILLED WATER PUMPS (HWP1&2, CHWP-1&2).

B. UNIT SHALL BE MANUFACTURED BY ABB, TOSHIBA OR MITSUBISHI.

C. UNIT SHALL HAVE THE FOLLOWING OPTIONS:

1. NEMA 1 TYPE ENCLOSURE.

2. OPERATING TEMPERATURE RANGE 32 DEG F – 104 DEG F.

3. 3% INPUT LINE REACTOR

4. HOA (HAND / OFF / AUTO) SWITCH AND MANUAL/AUTOMATIC LEAD PUMP SELECTOR.

5. POTENTIOMETER (0-100%)

6. BYPASS WITH SERVICE SWITCH

D. THE UNIT IS TO BE MOUNTED IN THE SAME ROOM AS THE PUMP.

E. THIS UNIT IS INTENDED TO BE MOUNTED INDOORS ONLY.

HVAC+ELECTRICAL
PLUMBING
FIRE PROTECTION

BOILER REPLACEMENT
AT THE
FLORENCE K. MURRAY
JUDICIAL COMPLEX
45 WASHINGTON SQUARE
NEWPORT, RI 02840

Status: CONSTRUCTION DRAWINGS

Sheet Title: SPECIFICATIONS MECHANICAL

Project No:	201197
Drawn By:	JPS
Checked By:	RCN
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Drawing No: M-4

CEC No. 201197

PART 3 – EXECUTION

3.01 AUTOMATIC TEMPERATURE CONTROLS

A. THIS SECTION INCLUDES CONTROL EQUIPMENT FOR HVAC SYSTEMS AND COMPONENTS, INCLUDING CONTROL COMPONENTS FOR TERMINAL HOUSING AND COOLING UNITS NOT SUPPLIED WITH FACTORY-MOUNTED CONTROLS.

B. THE FOLLOWING SPECIFICATION DESCRIBES COMPONENTS OF THE CONTROL SYSTEM REQUIRED FOR THIS PROJECT. PROVIDE ALL COMPONENTS NECESSARY FOR A COMPLETE AUTOMATIC CONTROL SYSTEM THAT WILL ACCOMPLISH ALL OF THE SEQUENCES OF OPERATIONS DESCRIBED IN THESE SPECIFICATIONS.

C. PROVIDE SHOP DRAWINGS FOR THE FOLLOWING:

1. SCHEMATIC FLOW DIAGRAMS.

2. POWER, SIGNAL, AND CONTROL WIRING DIAGRAMS.

3. DETAILS OF CONTROL PANEL FACES.

4. DAMPER SCHEDULE.

5. VALVE SCHEDULE.

6. DDC SYSTEM HARDWARE: WIRING DIAGRAMS, SCHEMATIC FLOOR PLANS, AND SCHEMATIC CONTROL DIAGRAMS.

7. CONTROL SYSTEM SOFTWARE: SCHEMATIC DIAGRAMS, WRITTEN DESCRIPTIONS, AND POINTS LIST.

D. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.

E. ACCEPTABLE MANUFACTURERS SHALL BE JOHNSON CONTROLS CORPORATION, JOHNSON CONTROLS, INC, OR SIEMENS BUILDING TECHNOLOGIES, INC.

F. CONTROL SYSTEM SHALL CONSIST OF SENSORS, INDICATORS, ACTUATORS, FINAL CONTROL ELEMENTS, INTERFACE EQUIPMENT, OTHER APPARATUS, ACCESSORIES, AND SOFTWARE CONNECTED TO DISTRIBUTED CONTROLLERS OPERATING IN MULTIUSER, MULTITASKING ENVIRONMENT ON TOKEN-PASSING NETWORK AND PROGRAMMED TO CONTROL MECHANICAL SYSTEMS. AN OPERATOR WORKSTATION PERMITS INTERFACE WITH THE NETWORK VIA DYNAMIC COLOR GRAPHICS WITH EACH MECHANICAL SYSTEM, BUILDING FLOOR PLAN, AND EQUIPMENT, DEVICE DEPICTED BY POINT-AND-CLICK GRAPHICS.

G. ALL HOT CONTROLS SHALL COMMUNICATE WITH EXISTING FRONT END LOCATED AT THE LIGHT COURTHOUSE IN PROVIDENCE, RI. PROVIDE ALL NEW SOFTWARE, GRAPHICS, ETC. FOR A FULLY OPERATIONAL AND ADJUSTABLE SYSTEM AT THIS LOCATION.

3.02 SEQUENCE OF OPERATIONS

A. BOILERS

1. THE NEW BOILER SHALL UTILIZE INJECTION PIPING.

2. THE NEW CONTROLS SHALL SEQUENCE THE BOILERS TO FIRE UPON A CALL FOR HEAT.

3. THE BOILERS SHALL OPERATE UNDER OUTDOOR RESET CONTROL (180°F 20°F AT 0°F DAT AND 120°F 20°F AT 60°F DAT).

4. UPON A CALL TO FIRE FROM THE NEW BOILERS, THE DEDICATED CIRCULATION PUMP(S) SHALL START, PROVE FLOW AND ALLOW THE DEDICATED BOILER TO FIRE.

5. PROVIDE ALARMS FOR LOW FLOW, LOW TEMPERATURE AND ANY OTHER MECHANIC ALARM SHOWN ON THE BOILER CONTROL PANEL AT THE DDC FRONT END.

B. PUMPS

1. BOILER CIRCULATION PUMPS SHALL RUN WHEN BOILERS ARE ENABLED TO FIRE.

2. MAIN PUMPS SHALL RUN AS INDICATED AT THE FRONT END.

3. OPERATOR SHALL PUT PUMPS INTO SEASONS OF COOLING MODES. UNDER HEATING MODES THE HOT WATER BOILERS SHALL RUN. UNDER COOLING MODES THE CHILLED WATER PUMPS SHALL RUN.

4. BOTH HEATING AND CHILLED WATER PUMPS SHALL RUN IN LEAD / LAG FUNCTION CHANGING EACH DAY BEGINNING TUESDAY OF EACH MONTH OR AS DIRECTED BY OWNER. UPON FAILURE FOR THE LEAD PUMP TO RUN (AS INDICATED BY A CURRENT OR FLOW SWITCH) THE LAG BOILER SHALL START AND AN ALARM SHALL BE SENT TO THE DDC FRONT END.

C. COMBUSTION AIR

1. UPON A CALL TO FIRE FROM THE EXISTING WATER HEATER, THE OUTDOOR AIR DAMPER ON THE HEATING SHUTOFF SHALL BE INDICATED TO OPEN. ONCE WATER HEATER TEMPERATURE IS SATISFIED AND IS OFF, THE DAMPER SHALL CLOSE.

D. MECHANICAL ROOM VENTILATION

1. PROVIDE A SPACE THERMOSTAT IN THE MECHANICAL ROOM. UPON DECREASE OF TEMPERATURES ABOVE SET (ADJUSTABLE) IN THE SPACE, OPEN THE COMBUSTION AIR DAMPER TO OPEN. ONCE TEMPERATURE DROPS BELOW 70°F (ADJUSTABLE) THE DAMPER SHALL CLOSE. THIS SEQUENCE SHALL NOT INTERFERE WITH COMBUSTION AIR SEQUENCE LISTED ABOVE.

3.03 BALANCING, ADJUSTING, TESTING, & CLEANING

1. ALL HVAC SYSTEMS SHALL BE BALANCED BY AN INDEPENDENT TESTING AND BALANCING AGENCY CERTIFIED BY AABC. ALL TESTING SHALL BE IN ACCORDANCE WITH AABC 8 NATIONAL STANDARDS FOR FIELD MEASUREMENT AND INSTRUMENTATION, 7TH# #1288. SYSTEMS SHALL BE ADJUSTED TO FLOW AND AIR QUANTITIES INDICATED. A WRITTEN REPORT SHALL BE SUBMITTED FOR REVIEW.

2. PROVIDE QUALIFIED PERSONNEL, EQUIPMENT, APPARATUS AND SERVICES FOR STARTUP TESTING AND BALANCING OF MECHANICAL SYSTEMS FOR QUANTITIES INDICATED ON DRAWINGS UPON COMPLETION OF INSTALLATION. BALANCE SYSTEMS IN ACCORDANCE WITH CODES, STANDARDS, REGULATIONS, AND AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL USE RECENTLY CALIBRATED EQUIPMENT CONVENIENT WITH INSTALLED EQUIPMENT AND SUBMIT BALANCING REPORT TO THE ENGINEER.

3. INTERFACE BALANCING: BALANCE SYSTEM TO GPM FLOWS INDICATED. TAG EACH BALANCING DEVICE WITH GPM OF FINAL BALANCE AND POSITION OF BALANCE POINT.

3.04 PROJECT CLOSE-OUT

1. RESTORE EXISTING FACILITIES USED DURING CONSTRUCTION TO ORIGINAL CONDITION. CLEAN PORTIONS OF THE SITE AFFECTED BY WORK OF THIS CONTRACT. REMOVE WASTE AND SURPLUS MATERIALS FROM THE SITE.

2. SUBMIT TWO COPIES OF OPERATION AND MAINTENANCE DATA BOUND IN THREE-RING BINDERS. INCLUDE WARRANTIES, EQUIPMENT, BALANCING REPORT, AND PROJECT DRAWINGS AND CONTRACTS. THE MANUAL SHALL ALSO INCLUDE A SCHEDULE FOR EQUIPMENT MAINTENANCE. SCHEDULE SHALL PROVIDE A CONCISE OUTLINE FOR EQUIPMENT MAINTENANCE. EXAMPLE: FILTERS SHALL BE CHANGED EVERY 3 MONTHS, TEST DAMPERS ONCE A YEAR, MAINTAIN NEUTRALIZING KIT AT THE AIR HANDLERS.

3. CONTRACTOR SHALL INSTRUCT OWNER IN USE OF SYSTEM.

4. CONTRACTOR SHALL DEMONSTRATE ALL SEQUENCES OF CONTROL TO THE ENGINEER. THE TEMPERATURE CONTROL AND BALANCING NON-CONTRACTORS SHALL ACCOMPANY THE ENGINEER DURING CHECK-OUT PROCEDURE. FOREMAN SHALL BE EQUIPPED WITH TOOLS AND SPARE PARTS TO MAKE MINOR REPAIRS AND ADJUSTMENTS.

CHRISTOPHER ENGINEERING
MECHANICAL ENGINEERS
PIPE INSTALLATION
40 OFFICE PARKWAY
EAST PROVIDENCE, RHODE ISLAND
PH 401.438.7733
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Project
BOILER REPLACEMENT AT THE FLORENCE K. MURRAY JUDICIAL COMPLEX
45 WASHINGTON SQUARE NEWPORT, RI 02840

District
CONSTRUCTION DRAWINGS

No.	Revision Description	Date

Sheet Title
SPECIFICATIONS CONTINUED MECHANICAL

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Appendix C

RHODE ISLAND JUDICIARY
GENERAL TERMS AND CONDITIONS OF PURCHASE

Preamble

The Judicial Purchasing Office may, from time to time, make amendments to the General Terms and Conditions when the Judicial Purchasing Agent determines that such amendments are in the best interest of the Judiciary. Amendments shall be made available for public inspection at the Office of the Secretary of State but shall not require formal public notice and hearing. Copies of the Terms and Conditions shall be provided to any individual or firm requesting to become a registered bidder. Applicants shall be required, as part of the application process, to
certify that they have read the General Terms and Conditions and understand that they apply to all judicial purchases.

JUDICIAL PURCHASING OFFICE GENERAL CONDITIONS OF PURCHASE

All Judicial purchase orders, contracts, solicitations, delivery orders and service requests shall incorporate and be subject to the provisions of Rhode Island General Laws 8-15-4 and the judicial purchasing rules and regulations adopted pursuant thereto, all other applicable provisions of the Rhode Island General Laws, specific requirements described in the Request or Contract, and the following General Conditions of Purchase:

1. GENERAL

All purchase orders, contracts, solicitations, delivery orders, and service requests are for specified goods and services, in accordance with express terms and conditions of purchase, as defined herein. For the purposes of this document, the terms "bidder" and "contractor" refer to any individual, firm, corporation, or other entity presenting a proposal indicating a desire to enter into contracts with the Judiciary, or with whom a contract is executed by the Judicial Purchasing Agent, and the term "contractor" shall have the same meaning as"vendor".

2. ENTIRE AGREEMENT

The Judiciary's Purchase Order, or other Judiciary contract endorsed by the Judicial Purchasing Office, shall constitute the entire and exclusive agreement between the Judiciary and any contractor receiving an award. In the event any conflict between the bidder's standard terms of sale, these conditions or more specific provisions contained in the solicitation shall govern.

All communication between the Judiciary and any contractor pertaining to any award or contract shall be accomplished in writing.

a. Each proposal will be received with the understanding that the acceptance, in writing, by contract or Purchase Order by the Judicial Purchasing Agent of the offer to do work or to furnish any or all the materials, equipment, supplies or services described therein shall constitute a contract between the bidder and the Judiciary. This shall bind the bidder on his part to furnish and deliver at the prices and in accordance with the conditions of said accepted proposal and detailed specifications and the Judiciary on its part to order from such contractor (except in case of emergency) and to pay for at the agreed prices, all materials, equipment, supplies or services specified and delivered. A contract shall be deemed executory only to the extent of funds available for payment of the amounts shown on Purchase Orders issued by the Judiciary to the contractors.

b. No alterations or variations of the terms of the contract shall be valid or binding upon the Judiciary unless submitted in writing and accepted by the Judicial Purchasing Agent. All orders and changes thereof must emanate from the Judicial Purchasing Office: no oral agreement or arrangement made by a contractor with an agency or employee will be considered to be binding on the Judicial Purchasing Agent, and may be disregarded.

c. Contracts will remain in force for the contract period specified or until all articles or services ordered before date of termination shall have been satisfactorily delivered or rendered and accepted and thereafter until all terms and conditions have been met, unless:

1. terminated prior to expiration date by satisfactory delivery against orders of entire quantities, or
2. extended upon written authorization of the Judicial Purchasing Agent and accepted by the contractor, to permit ordering of the unordered balances or additional quantities at the contract price and in accordance with the contract terms, or
3. canceled by the Judiciary in accordance with other provisions stated herein.

d. It is mutually understood and agreed that the contractor shall not assign, transfer, convey, sublet or otherwise dispose of this contract or his right, title or interest therein, or his power to execute such contract, to any other person, company or corporation, without the previous consent, in writing, of the Judicial Purchasing Agent.

e. If, subsequent to the submission of an offer or issuance of a purchase order or execution of a contract, the bidder or contractor shall merge with or be acquired by another entity, the contract may be terminated, except as

a corporate resolution prepared by the contractor and the new entity ratifying acceptance of the original bid or contract terms, condition, and pricing is submitted to the Judicial Purchasing Office, and expressly accepted.

f. The contractor or bidder further warrants by submission of an offer or acceptance of a purchase order or other contract that he has no knowledge at the time of such action of any outstanding and delinquent or otherwise unsettled debt owed by him to the Judiciary, and agrees that later discovery by the Judicial Purchasing Agent that this warranty was given in spite of such knowledge, except where the matter is pending in hearing or from any appeal therefrom, shall form reasonable grounds for termination of the contract.

3. SUBCONTRACTS

No subcontracts or collateral agreements shall be permitted, except with the Judiciary's express written consent. Upon request, contractors must submit to the Judicial Purchasing Office a list of all subcontractors to be employed in the performance of any Purchase Order or other contract arising from this Request.

4. RELATIONSHIP OF PARTIES

The contractor or bidder warrants, by submission of an offer or acceptance of a purchase order or other contract, that he is not an employee, agent, or servant of the Judiciary, and that he is fully qualified and capable in all material regards to provide the specified goods and services. Nothing herein shall be construed as creating any contractual relationship or obligation between the Judiciary and any sub-bidder, subcontractor, supplier, or employee of the contractor or offeror.

5. COSTS OF PREPARATION

All costs associated with the preparation, development, or submission of bids or other offers will be borne by the offeror. The Judiciary will not reimburse any offeror for such costs.

6. SPECIFIED QUANTITY REQUIREMENT

Except where expressly specified to the contrary, all solicitations and contracts are predicated on a specified quantity of goods or services, or for a specified level of funding.

a. The Judiciary reserves the right to modify the quantity, scope of service, date of delivery or completion, or funding of any contract, with no penalty or charge, by written notice to the contractor, except where alternate terms have been expressly made a part of the contract.

b. The Judiciary shall not accept quantities in excess of the specified quantity except where the item is normally sold by weight (where sold by weight, the Judiciary will not accept quantities greater than ten per cent [10%] of the specified quantity), or where the Request or Contract provides for awards for other than exact quantities.

c. Purchase Orders or other contracts may be increased in quantity or extended in term without subsequent solicit with the mutual consent of the contractor and the Judiciary, where determined by the Judicial Purchasing Agent to be in the Judiciary's best interest.

7. TERM AND RENEWAL

Where offers have been requested or contracts awarded for terms exceeding periods of twelve (12) months, it is mutually understood and agreed that the Judiciary's commitment is limited to a base term not to exceed twelve (12) months, subject to renewal annually at the Judiciary's sole option for successive terms as otherwise described, except where expressly specified to the contrary. Purchase orders appearing to commit to obligations of funding or terms of performance may be executed for administrative convenience, but are otherwise subject to this provision, and in such cases the Judiciary's renewal shall be deemed to be automatic, conditional on the continued availability of appropriated funds for the purpose, except as written notice of the Judiciary's intent not to renew is served.

8. DELIVERY/COMPLETION

Delivery must be made as ordered and/or projects completed in accordance with the proposal. If delivery qualifications do not appear on the bidder's proposal, it will be interpreted to mean that goods are in stock and that shipment will be made within seven (7) calendar days. If the project completion date is not specified in the proposal, the date shall be determined by the Judicial Purchasing Agent. The decision of the Judicial Purchasing Agent, as to reasonable compliance with the delivery terms, and date of completion shall be final. Burden of proof of delay in receipt of order shall rest with the contractor. No delivery charges shall be added to invoices except when authorized on the Purchase Order.

9. FOREIGN CORPORATIONS

In accordance with Title 7 Chapter 1.1 ("Business Corporations") of the General Laws of Rhode Island, no foreign corporation shall have the right to transact business in this state until it shall have procured a certificate of authority so to do from the Secretary of State.

10. PRICING

All pricing offered or extended to the Judiciary is considered to be firm and fixed unless expressly provided for to the contrary. All prices shall be quoted F.O.B. Destination with freight costs included in the unit cost to be paid by the Judiciary, except, where the Request or Contract permits, offers reflecting F.O.B. Shipping Point will be considered, and freight costs may then be prepaid and added to the invoice.

11. COLLUSION

Bidder or contractor warrants that he has not, directly or indirectly, entered into any agree participated in any collusion or otherwise taken any action in restraint of full competitive bidding. In special circumstances, an executed affidavit will be required as a part of the bid.

12. PROHIBITION AGAINST CONTINGENT FEES AND GRATUITIES

Bidder or contractor warrants that he has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the Judiciary for the purpose of obtaining any contract or award issued by the Judiciary. Bidder or contractor further warrants that no commission or other payment has been or will be received from or paid to any third party contingent on the award of any contract by the Judiciary, except as shall have been expressly communicated to the Judicial Purchasing Agent in writing prior to acceptance of the contract or award in question. Subsequent discovery by the Judiciary of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts and suspension or debarment of the bidder(s) or contractor(s) involved.

13. AWARDS

Awards will be made with reasonable promptness and by written notice to the successful bidder (only); bids are considered to be irrevocable for a period of sixty (60) days following the bid opening unless expressly provided for to the contrary in the Request, and may not be withdrawn during this period without the express permission of the Judicial Purchasing Agent.

a. Awards shall be made to the bidder(s) whose offer(s) constitutes the lowest responsive price offer (or lowest responsive price offer on an evaluated basis) for the item(s) in question or for the Request as a whole, at the option of the Judiciary. The Judiciary reserves the right to determine those offers which are responsive to the Request, or which otherwise serve its best interests.

b. The Judiciary reserves the right, before making award, to initiate investigations as to whether or not the materials, equipment, supplies, qualifications or facilities offered by the bidder meet the requirements set forth in the proposal and specification, and are ample and sufficient to insure the proper performance of the contract in the event of award. If upon such examination it is found that the conditions of the proposal are not complied with or that articles or equipment proposed to be furnished do not meet the requirements called for, or that the qualifications or facilities are not satisfactory, the Judiciary may reject such a bid. It is distinctly understood, however, that nothing in the foregoing shall mean or imply that it is obligatory upon the Judiciary to make any examinations before awarding a contract; and it is further understood that if such examination is made, it in no way relieves the contractor from fulfilling
all requirements and conditions of the contract.

c. Qualified or conditional offers which impose limitations of the bidder's liability or modify the requirements of the bid, offers for alternate specifications, or which are made subject to different terms and conditions than those specified by the Judiciary may, at the option of the
Judiciary, be
   1. rejected as being non-responsive, or
   2. set aside in favor of the Judiciary's terms and conditions (with the consent of the bidder), or
   3. accepted, where the Judicial Purchasing Agent determines that such acceptance best serves the interests of the Judiciary.

Acceptance or rejection of alternate or counter-offers by the Judiciary shall not constitute a precedent which shall be considered to be binding on successive solicitations or procurements.

d. Bids submitted in pencil, or which do not bear an original signature, in ink, by an owner or authorized agent thereof, will not be accepted.

e. Bids must be extended in the unit of measure specified in the Request. In the event of any discrepancy between unit prices and their extensions, the unit price will govern.

f. The Judicial Purchasing Agent reserves the right to determine the responsibility of any bidder for a particular procurement.

g. The Judicial Purchasing Agent reserves the right to reject any and all bids in whole or in part, to waive technical defects, irregularities, and omissions, and to give consideration to past performance of the offerors where, in his judgment the best interests of the Judiciary will be served by so doing.

h. The Judicial Purchasing Agent reserves the right to make awards by items, group of items or on the total low bid for all the items specified as indicated in the detailed specification, unless the bidder specifically indicates otherwise in his bid.

i. Preference may be given to bids on products raised or manufactured in the State of Rhode Island, other things being equal.

j. The impact of discounted payment terms shall not be considered in evaluating responses to any Request.

k. The Judicial Purchasing Agent reserves the right to act in the Judiciary's best interests regarding awards caused by clerical errors by the Judicial Purchasing Office.

14. SUSPENSION AND DEBARMENT

The Judicial Purchasing Agent may suspend or debar any vendor or potential bidder, for good cause shown:

a. A debarment or suspension against a part of a corporate entity constitutes debarment or suspension of all of its divisions and all other organizational elements, except where the action has been specifically limited in scope and application, and may include all known corporate affiliates of a contractor, when such offense or act occurred in connection with the affiliate's performance of duties for or on behalf of the contractor, or with the knowledge, approval, or acquiescence of the contractor or one or more of its principals or directors (or where the contractor otherwise participated in, knew of, or had reason to know of the acts).

b. The fraudulent, criminal or other serious improper conduct of any officer, director, shareholder, partner, employee, or any other individual associated with a contractor may be imputed to the contractor when the conduct occurred in connection with the individual's performance of duties for or on behalf of the contractor, or with the contractor's knowledge, approval or acquiescence. The contractor's acceptance of benefits derived from the conduct shall be evidence of such knowledge, approval, or acquiescence.

c. A vendor or contractor who knowingly engages as a subcontractor for a contract awarded by the Judiciary to a vendor or contractor then under a ruling of suspension or debarment by the Judiciary shall be subject to disallowance of cost, annulment or termination of award, issuance of a stop work order, or debarment or suspension, as may be judged to be appropriate by the Judicial Purchasing Agent.

15. PUBLIC RECORDS

Contractors and bidders are advised that certain documents, correspondence, and other submissions to the Judicial Purchasing Office may be voluntarily made public by the Judiciary absent specific notice that portions of such submittals may contain confidential or proprietary information, such that public access to those items should be withheld.

16. PRODUCT EVALUATION

In all specifications, the words "or equal" are understood after each article when manufacturer's name or catalog are referenced. If bidding on items other than those specified, the bidder must, in every instance, give the trade designation of the article, manufacturer's name and detailed specifications of the item the bidder proposes to furnish; otherwise, the bid will be construed as submitted on the identical commodity described in the detailed specifications. The Judicial Purchasing Agent reserves the right to determine whether or not the item submitted is the approved equal the detailed specifications.

a. Any objections to specifications must be filed by a bidder, in writing, with the Judicial Purchasing Agent at least 96 hours before the time of bid opening to enable the Judicial Purchasing Office to properly investigate the objections.

b. All standards are minimum standards except as otherwise provided for in the Request or Contract.

c. Samples must be submitted to the Judicial Purchasing Office in accordance with the terms of the proposals and detailed specifications. Samples must be furnished free of charge and must be accompanied by descriptive memorandum invoices indicating whether or not the bidder desires their return and specifying the address to which they are to be returned (at the bidder's risk and expense), provided they have not been used or made useless by tests; and absent instructions, the samples shall be considered to be abandoned. Award samples may be held for comparison with deliveries.

d. All samples submitted are subject to test by any laboratory the Judicial Purchasing Agent may designate.

17. PRODUCT ACCEPTANCE

All merchandise offered or otherwise provided shall be new, of prime manufacture, and of first quality unless otherwise specified by the Judiciary. The Judiciary reserves the right to reject all nonconforming goods, and to cause their return for credit or replacement, at the Judiciary's option. Contract deliverables specified for procurements of services shall be construed to be work products, and subject to the provisions of this section.

a. Failure by the Judiciary to discover latent defect(s) or concealed damage or non-conformance shall not foreclose the Judiciary's right to subsequently reject the goods in question.

b. Formal or informal acceptance by the Judiciary of non-conforming goods shall not constitute a precedent for successive receipts or procurements.

c. Where the contractor fails to promptly cure the defect or replace the goods, the Judiciary reserves the right to cancel the Purchase Order, contract with a different contractor, and to invoice the original contractor for any differential in price over the original contract price.

d. When materials, equipment or supplies are rejected, the same must be removed by the contractor from the premises of the Judiciary within forty-eight (48) hours of notification. Rejected items left longer than two days will be regarded as abandoned and the Judiciary shall have the right to dispose of them as its own property.

18. PRODUCT WARRANTIES

All product or service warranties normally offered by the contractor or bidder shall accrue to the Judiciary's benefit, in addition to any special requirements which may be imposed by the Judiciary. Every unit delivered must be guaranteed against faulty material and workmanship for a period of one year unless otherwise specified, and the Judiciary may, in the event of failure, order its replacement, repair, or return for full credit, at its sole option.

19. PAYMENT

Unless otherwise provided for by the Request or Contract, payment shall not be made until delivery has been made, or services performed, in full, and accepted. Payment shall not be due prior to thirty (30) working days following the latest of completion, acceptance, or the rendering of a properly submitted invoice.

a. Payment terms other than the foregoing may be rejected as being nonresponsive.

b. No partial shipments, or partial completion will be accepted, unless provided for by the Request or Contract.

c. Where a question of quality is involved, or failure to complete a project by the specified due date, payment in whole or part against which to charge back any adjustment required, shall be withheld at the direction of the Judicial Purchasing Agent. In the event a cash discount is stipulated, the withholding of payments, as herein described, will not deprive the Judiciary from taking such discount.

d. Payments for used portion of inferior delivery or late delivery will be made by the Judiciary on an adjusted price basis.

e. Payments on contracts under architectural or engineering supervision must be accompanied by a Certificate of Payment and Statement of Account signed by the architect or engineer and submitted to the Judicial Purchasing Office for approval.

20. THIRD PARTY PAYMENTS

The Judiciary recognizes no assigned or collateral rights to any purchase agreement except as may be expressly provided for in the bid or contract documents, and will not accede to any request for third party or joint payment(s), except as provided for in specific orders by a court of competent jurisdiction, or by express written permission of the Judicial Purchasing Agent. Where an offer is contingent upon such payment(s), the offeror is obligated to serve affirmative notice in his bid submission.

21. SET-OFF AGAINST PAYMENTS

Payments due the contractor may be subject to reduction equal to the amount of unpaid and delinquent state taxes (or other just debt owed to the State), except where notice of delinquency has not been served or while the matter is pending in hearing or from any appeal therefrom.

22. CLAIMS

Any claim against a contractor may be deducted by the Judiciary from any money due him in the same or other transactions. If no deduction is made in such fashion, the contractor shall pay the Judiciary the amount of such claim on demand. Submission of a voucher and payment, thereof, by the Judiciary shall not preclude the Judicial Purchasing Agent from demanding a price adjustment in any case when the commodity delivered is later found to deviate from the specifications and proposal.

a. The Judicial Purchasing Agent may assess dollar damages against a vendor or contractor determined to be non-performing or otherwise in default of their contractual obligations equal to the cost of remedy incurred by the Judiciary, and make payment of such damages a condition for consideration for any subsequent award. Failure by the vendor or contractor to pay such damages shall constitute just cause for disqualification and rejection, suspension, or debarment.

23. CERTIFICATION OF FUNDING

The Chief Purchasing Officer shall provide certification as to the availability of funds to support the procurement for the current fiscal year ending June 30th only. Where delivery or service requirements extend beyond the end of the current fiscal year, such extensions are subject to both the availability of appropriated funds and a determination of continued need.

24. UNUSED BALANCES

Unless otherwise specified, all unused Blanket Order quantities and/or unexpended funds shall be automatically canceled on the expiration of the specified term. Similarly, for orders encompassing more than one fiscal year, unexpended balances of funding allotted for an individual fiscal year may be liquidated at the close of that fiscal year, at the Judiciary's sole option.

25. MINORITY BUSINESS ENTERPRISES

Pursuant to the provisions of Title 37 Chapter 14.1of the General Laws, the Judiciary reserves the right to apply additional consideration to offers, and to direct awards to bidders other than the responsive bid representing the lowest price where:

a. the offer is fully responsive to the terms and conditions of the Request, and
b. the price offer is determined to be within a competitive range (not to exceed 5% higher than the lowest responsive price offer) for the product or service, and
c. the firm making the offer has been certified by the R.I. Department of Economic Development to be a small business concern meeting the criteria established to be considered a Minority Business Enterprise. Ten per cent [10%] of the dollar value of the work performed against contracts for construction exceeding $5,000 shall be performed by Minority Business Enterprises where it has been determined that subcontract opportunities exist, and where certified Minority Business Enterprises are available. A contractor may count towards its MBE, DBE, or WBE goals 60% of its expenditures for materials and supplies required under a contract and obtained from an MBE, DBE, or WBE regular dealer, and 100% of such expenditures when obtained from an MBE, DBE, or WBE manufacturer. Awards of this type shall be subject to approval, by the Chief Purchasing Officer, of a Subcontracting Plan submitted by the bidder receiving the award.

26. PREVAILING WAGE REQUIREMENT

In accordance with Title 37 Chapter 13 of the General Laws of Rhode Island, payment of the general prevailing rate of per diem wages and the general prevailing rate for regular, overtime and other working conditions existing in the locality for each craft, mechanic, teamster, or type of workman needed to execute this work is a requirement for both contractors and subcontractors for all public works.

27. EQUAL OPPORTUNITY COMPLIANCE, HANDICAPPED ACCESS AND AFFIRMATIVE ACTION

Contractors of the Judiciary are required to demonstrate the same commitment to equal opportunity as prevails under federal contracts controlled by Federal Executive Orders 11246, 11625, 11375 and 11830, and Title 28 Chapter 5.1 of the General Laws of Rhode Island.

Affirmative action plans shall be submitted by the contractor for review by the State Equal Opportunity Office. A contractor's failure to abide by the rules, regulations, contract terms and compliance reporting provisions as established shall be grounds for forfeiture and penalties as shall be established, including but not limited to suspension.

28. DRUG-FREE WORKPLACE REQUIREMENT

Contractors who do business with the Judiciary and their employees shall abide by the State's drug-free workplace policy and the contractor shall so attest by signing a certificate of compliance.

29. TAXES

The Judiciary is exempt from payment of excise, transportation and sales tax imposed by the Federal or State Government. These taxes should not be included in the proposal price. Exemption Certificates will be furnished upon request.

30. INSURANCE

All construction contractors, independent tradesmen, or firms providing any type of maintenance, repair, or other type of service to be performed on judicial premises, buildings, or grounds are required to purchase and maintain coverage with a company or companies licensed to do business in the state as follows:

a. Comprehensive General Liability Insurance
   1) Bodily Injury $1,000,000 each occurrence/ $1,000,000 annual aggregate
   2) Property Damage $500,000 each occurrence /$500,000 annual aggregate

   Independent Contractors

   Contractual - including construction hold harmless and other types of contracts or agreements in effect for insured operations

   Completed Operations

   Personal Injury (with employee exclusion deleted)
b. Automobile Liability Insurance Combined Single Limit $1,000,000 each occurrence

Bodily Injury
Property Damage, and in addition non-owned and/or hired vehicles and equipment

c. Workers' Compensation Insurance
Coverage B $100,000

The Judicial Purchasing Agent reserves the right to consider and accept alternate forms and plans of insurance or to require additional or more extensive coverage for any individual requirement. Successful bidders shall provide certificates of coverage, reflecting the Rhode Island Judiciary as an additional insured, to the Judicial Purchasing Office, forty-eight (48) hours prior to the commencement of work, as a condition of award. Failure to comply with this provision shall result in rejection of the offeror's bid.

31. BID SURETY

When requested, a bidder must furnish a Bid Bond or Certified Check for 5% of his bid, or for the stated amount shown in the solicitation. Bid Bonds must be executed by a reliable Surety Company authorized to do business in the State of Rhode Island. Failure to provide Bid Surety with bid may be cause for rejection of bid. The Bid Surety of any three bidders in contention will be held until an award has been made according to the specifications of each proposal. All others will be returned by mail within 48 hours following the bid opening. Upon award of a contract, the remaining sureties will be returned by mail unless instructed to do otherwise.

32. PERFORMANCE AND LABOR AND PAYMENT BONDS

A performance bond and labor and payment bond of up to 100% of an award may be required by the Judicial Purchasing Agent. Bonds must meet the following requirements:

a. Corporation: The Bond must be signed by an official of the corporation above his/her official title and the corporate seal must be affixed over his/her signature.
b. Firm or Partnership: The Bond must be signed by all of the partners and must indicate that they are "Doing Business As (name of firm)."
c. Individual: The Bond must be signed by the individual owning the business and indicate "Owner."
d. The Surety Company executing the Bond must be licensed to do business in the State of Rhode Island or Bond must be countersigned by a company so licensed.
e. The Bond must be signed by an official of the Surety Company and the corporate seal must be affixed over his signature.
f. Signatures of two witnesses for both the principal and the Surety must appear on the Bond.
g. A Power of Attorney for the official signing of the Bond for the Surety Company must be submitted with the Bond.

33. SUSPENSION, DEFAULT AND TERMINATION

a. Suspension of a Contract by the Judiciary

The Judiciary reserves the right at any time and for any reason to suspend all or part of this contract, for a reasonable period, not to exceed sixty days, unless the parties agree to a longer period. The Judiciary shall provide the contractor with written notice of the suspension order signed by the Purchasing Agent or his or her designee, which shall set forth the date upon which the suspension shall take effect, the date of its expiration, and all applicable instructions. Upon receipt of said order, the contractor shall immediately comply with the order and suspend all work under this contract as specified in the order. The contractor shall take all reasonable steps to mitigate costs and adverse impact to the work specified in the contract during the suspension period. Before the order expires, the Judiciary shall either:

1. cancel the suspension order;
2. extend the suspension order for a specified time period not to exceed thirty (30) days; or
3. terminate the contract as provided herein.

The contractor shall resume performance once a suspension order issued under this section is canceled or expires. If as a result of the suspension of performance, there is a financial or schedule impact upon the contract, an appropriate adjustment may be made by, or with the approval of, the Judicial Purchasing Agent. Any adjustment shall be set forth in writing. After a suspension order has been canceled or expires, the contractor shall provide any request for adjustment to the Judicial Purchasing Agent within thirty (30) days after resuming work performance.

b. Termination of a Contract by the Judiciary

1. Termination for Default or Nonperformance

If, for any reason, the contractor breaches the contract by failing to satisfactorily fulfill or perform any obligations, promises, terms, or conditions, and having been given reasonable notice of and opportunity to cure such default, fails to take satisfactory corrective action within the time specified by the Judiciary, the Judiciary may terminate the contract, in whole or in part, the termination of all outstanding contracts or sub-contracts held by the contractor, and the suspension or debarment of the contractor from future procurements by giving written notice to the contractor specifying the date for termination. The Judiciary shall endeavor to provide such notice at least seven (7) calendar days before the effective date of the termination.

A contractor who fails to commence within the time specified or complete an award made for repairs, alterations, construction, or any other service will be considered in default of contract. If contractor consistently fails to deliver quantities or otherwise perform as specified, the Judicial Purchasing Agent reserves the right to terminate the contract and contract for completion of the work with another contractor and seek recourse from the defaulting contractor or his surety. In the event of a termination for default or nonperformance, in whole or in part, the Judiciary may procure similar goods or services in a manner and upon terms it deems appropriate, and the contractor shall be liable for the excess costs incurred by the Judiciary as a result of the contractor's default. The contractor, or its surety, agrees to promptly reimburse the Judiciary for the excess costs, but shall have no claim to the difference should the replacement cost be less.

2. Termination Without Cause

The Judiciary may terminate the contract in whole or in part without cause at any time by giving written notice to the contractor of such termination at least thirty (30) days before the effective date of such termination. The notice shall specify the part(s) of the contract being terminated and the effective termination date.

Within thirty (30) days of the effective date of the termination of the contract the contractor shall compile and submit to the Judiciary an accounting of the work performed up to the date of termination. The Judiciary may consider the following claims in determining reasonable compensation owed to the contractor for work performed up to the date of termination:

(a) contract prices for goods or services accepted under the contract;
(b) costs incurred in preparing to perform and performing the terminated portion of the contract; or
(c) any other reasonable costs incurred by the contractor as a result of the termination.

The total sum to be paid to the contractor shall not exceed the total contract price, less any payments previously made to the contractor, the proceeds from any sales of goods or manufacturing materials, and the contract price for work not terminated.

3. Contractor's Obligations in the Event of Termination

If the contract is terminated for any reason, or expires pursuant to its terms, the contractor shall transfer and deliver to the Judiciary in the manner and to the extent directed by the Judiciary:

all finished or unfinished material prepared by the contractor; and
all material, if any, provided to the contractor by the Judiciary.

For the purposes of the contract, "material" shall include, but is not limited to, goods, supplies, parts, tools, machinery, equipment, furniture, fixtures, information, data, reports, summaries, tables, maps, charts, photographs, studies, recommendations, files, audiotapes, videotapes, records, keys, security badges, and documents.

If the contract is terminated for cause, the contractor shall not be relieved of liability to the Judiciary for damages sustained because of any breach by the contractor. In such event, the Judiciary may retain any amounts which may be due and owing to the contractor until such time as the exact amount of damages due the Judiciary from the contractor has been determined by the Judicial Purchasing Agent. The Judiciary may also set off any damages so determined against the amounts retained.

Upon termination of the contract, the contractor shall stop performance on the date specified, terminate any outstanding orders and subcontracts applicable to the terminated portion of the contract, and shall incur no further commitments or obligations in connection with the terminated performance. The contractor shall settle all liabilities and claims arising out of the termination of subcontracts and order generating from the terminated performance. The Judiciary may direct the contractor to assign the contractor's right, title and interest under terminated orders or subcontracts to the Judiciary or a third party.

Terminations of Purchase Order Contracts or Master Pricing Agreements shall require the signature of the Judicial Purchasing Agent or his designee. Notice of termination by either party shall be submitted in writing to the other party in

accordance with the termination clause of the contract, or where no specific termination clause is included, written notice shall be provided no later than thirty (30) days before the expiration of the contract.

34. INDEMNITY

The contractor guarantees:

a. To save the Judiciary, its agents and employees, harmless from any liability imposed upon the Judiciary arising from the negligence, either active or passive, of the contractor, as well as for the use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, article or appliance furnished or used in the performance of the contract of which the contractor is not the patentee, assignee or licensee.

b. To pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the city or town in which the installation is to be made and of the State of Rhode Island.

c. That the equipment offered is standard new equipment, latest model of regular stock product with all parts regularly used with the type of equipment offered; also, that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice.

35. CONTRACTOR'S OBLIGATIONS

In addition to the specific requirements of the contract, construction and building repair contractors bear the following standard responsibilities:

a. To furnish adequate protection from damage for all work and to repair damages of any kind, for which he or his workmen are responsible, to the building or equipment, to his own work, or to the work of other contractors;

b. The contractor, its subcontractor(s) and their employees and/or agents, shall protect and preserve property in the contractor or subcontractor's possessions in which the Judiciary has an interest, and any and all materials provided to the contractor or subcontractor by the Judiciary;

c. To clear and remove all debris and rubbish resulting from his work from time to time, as directed or required, a completion of the work leave the premises in a neat unobstructed condition, broom clean, and in satisfactory order and repair;

d. To store equipment, supplies, and material at the site only upon approval by the Judiciary, and at his own risk;

e. To perform all work so as to cause the least inconvenience to the Judiciary, and with proper consideration for the rights of other contractors and workmen;

f. To acquaint themselves with conditions to be found at the site, and to assume responsibility for the appropriate dispatching of equipment and supervision of his employees during the conduct of the work;

g. To ensure that his employees are instructed with respect to special regulations, policies, and procedures in effect for any judicial facility or site, and that they comply with such rules, including but not limited to security policies or practices and/or criminal background checks for any employees and/or subcontractors;

h. The contractor shall ensure that its employees or agents are experienced and fully qualified to engage in the activities and services required under the contract;

i. The contractor shall ensure that at all times while services are being performed under this contract at least one of its employees or agents on the premises has a good command of the English language and can effectively communicate with the Judiciary and its staff;

j. The contractor and contractor's employees or agents shall comply with all applicable licensing and operating requirements required by federal or state law and shall meet accreditation and other generally accepted standards of quality in the applicable field of activity;

k. The contractor shall secure and retain all employee-related insurance coverage for its employees and agents as required by law; and

l. The contractor, subcontractor, and his or her employees and agents shall not disclose any confidential information of the Judiciary to a third party. Confidential information means:

(1) any information of a sensitive or proprietary nature, whether or not specially identified as confidential or proprietary; or

(2) any information about the Judiciary gained during the performance of a contract that is not already lawfully in the public domain.

36. FORCE MAJEURE

All orders shall be filled by the contractor with reasonable promptness, but the contractor shall not be held responsible for any losses resulting if the fulfillment of the terms of the contract shall be delayed or prevented by wars, acts of public enemies, strikes, fires, floods, acts of God, or for any other acts not within the control of the contractor and which by the exercise of reasonable diligence, the contractor is unable to prevent.